cogitatio

MEDIA AND COMMUNICATION

Referendum Campaigns in the Digital Age

Volume 11

Issue 1

2023

Edited by Linards Udris and Mark Eisenegger

Open Access Journal
ISSN: 2183-2439

Media and Communication, 2023, Volume 11, Issue 1
Referendum Campaigns in the Digital Age

Published by Cogitatio Press
Rua Fialho de Almeida 14, 2º Esq.,
1070-129 Lisbon
Portugal

Design by Typografia®
http://www.typografia.pt/en/

Academic Editors
Linards Udris (University of Zurich)
Mark Eisenegger (University of Zurich)

Available online at: www.cogitatiopress.com/mediaandcommunication

This issue is licensed under a Creative Commons Attribution 4.0 International License (CC BY). Articles may be reproduced provided that credit is given to the original and *Media and Communication* is acknowledged as the original venue of publication.

Table of Contents

Referendum Campaigns in the Digital Age: Towards (More) Comparative Analyses in Hybrid Media Systems
Linards Udris and Mark Eisenegger 1–5

Mobile News Consumption and Its Relation to Young Adults' Knowledge About and Participation in Referendums
Daniel Vogler, Morley Weston, Quirin Ryffel, Adrian Rauchfleisch, Pascal Jürgens, Mark Eisenegger, Lisa Schwaiger, and Urs Christen 6–18

Googling Referendum Campaigns: Analyzing Online Search Patterns Regarding Swiss Direct-Democratic Votes
Sina Blassnig, Eliza Mitova, Nico Pfiffner, and Michael V. Reiss 19–30

Do Intensive Public Debates on Direct-Democratic Ballots Narrow the Gender Gap in Social Media Use?
Laurent Bernhard and Daniel Kübler 31–42

Level Playing Field or Politics as Usual? Equalization–Normalization in Direct Democratic Online Campaigns
Michaela Fischer and Fabrizio Gilardi 43–55

Referendum Campaigns in Hybrid Media Systems: Insights From the New Zealand Cannabis Legalisation Referendum
Marta Rychert and Chris Wilkins 56–68

Beyond Brexit? Public Participation in Decision-Making on Campaign Data During and After Referendum Campaigns
Julia Rone 69–80

Does Social Media Use Matter? A Case Study of the 2018 Irish Abortion Referendum
Theresa Reidy and Jane Suiter 81–85

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 1–5
https://doi.org/10.17645/mac.v11i1.6703

Editorial

Referendum Campaigns in the Digital Age: Towards (More) Comparative Analyses in Hybrid Media Systems

Linards Udris [1,]* and Mark Eisenegger [2]

[1] Research Center for the Public Sphere and Society (fög), University of Zurich, Switzerland
[2] Department of Communication and Media Research, University of Zurich, Switzerland

* Corresponding author (linards.udris@foeg.uzh.ch)

Submitted: 20 January 2023 | Published: 31 January 2023

Abstract
Referendum campaigns, which happen in many countries on the national or sub-national level, are highly important and special periods of political communication. Unlike elections, however, referendum campaigns are understudied phenomena. This thematic issue addresses patterns of referendum campaigns, which increasingly take place in digital and hybrid media environments, where political actors conduct campaigns through various channels, news media react to and shape debates on social media, and citizens receive a large share of political information from traditional and digital media. In this editorial, we provide a short overview of how research on referendum campaigns has evolved and how it has started to shift its attention away from news coverage and toward the role of campaign actors and the citizens who use (or engage with) search engines and social media platforms. The articles in this thematic issue reflect this shift but also show that news media remain important actors in referendum campaigns. Finally, we outline further research steps, which should include even more holistic analyses of the hybridity of referendum campaigns and hopefully more comparisons across cases.

Keywords
digitalization; direct democracy; hybrid media system; news media; referendum campaigns; social media; tech platforms

Issue
This editorial is part of the issue “Referendum Campaigns in the Digital Age” edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This editorial is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

National referendum campaigns happen in many countries across the world. Referendum campaigns are both highly important and represent special periods in political communication. Many referendums, especially if they happen infrequently, involve large parts of the electorate and can represent “watershed moments” for societies. Referendum campaigns are special periods because political actors increase their activities, referendums attract a great deal of media attention, and journalists are aware that special guidelines exist precisely for these intense campaign periods. Compared to election campaigns, referendum campaigns lead to even more volatility and insecurity. They involve issues rather than a party or a candidate on the ballot, and thus political actors are faced with the challenge of how to position themselves in relation to the issue and whether to ally themselves with other political actors (who might otherwise be competitors during elections). Additionally, referendum campaigns open the door for a broader set of actors, often from civil society, to engage in campaigning. Whereas in election reporting journalists can rely on the track records of political parties, in referendum coverage, neither journalists nor citizens know in advance which actors will campaign or who will take which positions. Because of these insecurities, campaigns are said to have particularly strong effects (de Vreese, 2015).

Against this background, it is surprising that referendum campaigns are not the focus of political communication scholars. Our thematic issue is one (modest) attempt to move the study of referendum campaigns more to

the forefront. The issue addresses patterns of referendum campaigns in public communication, which increasingly take place in digital and hybrid media environments, where political actors conduct campaigns through various media channels, journalists report on these activities on various channels, and citizens receive a large share of political information no longer only from traditional media but increasingly from digital media as well.

2. The Development of Research on Referendum Campaigns

Political communication scholars have traditionally studied referendum campaigns by focusing either on campaign actors, news media, or the audience. In the biggest research strand, scholars have focused on the patterns of news coverage, essentially evaluating the quality of media coverage across a broad set of indicators (Marcinkowski & Donk, 2012; Marquis et al., 2011) or focusing on one or few indicators, such as balance (e.g., Cushion & Lewis, 2017), the existence of issue frames instead of game frames (Dekavalla, 2018), dialogue (e.g., Hänggli, 2020), or topic diversity (e.g., Udris et al., 2016). While content analyses with core indicators of media quality have increasingly become complex and nuanced, they do not provide detailed insights on the quality of argumentation (one exception is Renwick & Lamb, 2013), a feature which is considered necessary for issue-focused referendum campaigns and threatened by politicians' "strategic lying" (Gaber & Fisher, 2021). For instance, Maia (2009) captured the number of arguments used in media texts but did not assess the validity or accuracy of arguments.

The "demand side" (i.e., decision-making processes and actual voting behavior of citizens) is frequently studied, but there are surprisingly few studies that have focused on news consumption (e.g., Bonfadelli & Friemel, 2012; Hopmann et al., 2016). The "supply side" of referendum campaigns (i.e., the role of political actors) has not featured prominently either. Among the few studies, Bernhard (2012) highlighted the strategic choices of political actors in forming coalitions for campaigns. Nai and Sciarini (2015) identified strategic and situational determinants of political actors' use of attacks in political advertising. Even fewer studies have combined data on campaign actors with content analyses and attitudes and behaviors of citizens. A few linkage studies set news coverage in relation to voting behavior (Schuck & de Vreese, 2011; Rinscheid & Udris, 2022). To the best of our knowledge, Kriesi's (2012) integrative approach is the only one that has systematically connected all three strands empirically.

3. Current Perspectives on Referendum Campaigns

In the digital age, the previous distinction between the production (or sending) of messages by campaign actors, the production of news by journalists, and the consumption of messages has become increasingly doubtful. On digital platforms, campaign actors can bypass the media, and users can also act as communicators, leading to a new, hybrid role of "produsers." Furthermore, on digital platforms, production and consumption become observable at the same time; each post comes with metrics that provide insights into user behavior and a possible link between content/message features and audience reactions. Overall, partly because of the increasing relevance of tech platforms and partly because of the better availability of metrics on user behavior, political communication scholars have shifted their attention away from news media content and toward the digital activities of campaign actors (e.g., Langer et al., 2019) and, above all, to media users who are active on platforms (Arlt et al., 2018; Balcells & Padró-Solanet, 2020; Del Vicario et al., 2017; van Klingeren et al., 2021).

This shift is reflected in the articles that were submitted to this thematic issue. Also considering the submissions that could not be included, it becomes clear that more articles are primarily addressing the role of tech platforms and the audience (the public) rather than referendum coverage of news media. This is a welcome shift, as it broadens our knowledge of increasingly digital referendum campaigns in innovative ways, such as tracking studies or data donations and large-scale datasets (e.g., a decade of Facebook posts). At the same time, most of the articles still address the importance of traditional news media during referendum campaigns in numerous ways. Thus, these articles underline the need to understand campaigns in hybrid media environments.

In a tracking study combined with a survey, Vogler et al. (2023) analyzed news consumption patterns of young adults in Switzerland in the run-up to a referendum, showing that the use of media content from traditional news media (on smartphones) and the use of social media have distinct effects on the duration and diversity of news consumption.

Based on user data from data donations and survey data, Blassnig et al. (2023) studied how Swiss citizens use Google to search for information before a referendum. They found that, despite the overall importance of search engines in people's everyday lives, Google is not frequently used for referendum-related information. Citizens still rely on information provided directly by news organizations instead.

Referendum coverage by news organizations has been shown to have an effect on how much voters use social media to form an opinion. Combining survey data from 13 referendum days with media content data, Bernhard and Kübler (2023) showed that men use social media for referendum-related information more often than women, but, as the intensity of news coverage increases, this "gender gap" on social media decreases.

Analyzing Facebook posts by campaign actors and user reactions to these posts before 91 votes in Switzerland from 2010 to 2020, Fischer and Gilardi (2023)

found that the amount of Facebook activities before referendum campaigns increases over time. Strikingly, users engage with campaigns of the challenger camp about as much as with those of pro-government campaigns. Further, while the government camp usually "outperforms" the challenger camp in terms of political ads in newspapers, the amount of campaign activity on Facebook does not differ as much on Facebook, which lends support to the "equalization hypothesis."

In a hybrid media environment, campaign actors have to take into account the various logics of media channels and platforms. In their case study on a referendum on cannabis legislation in New Zealand, Rychert and Wilkins (2023) shed light on the strategies of these campaign actors, not only contrasting political advertising on traditional media with that on social media but also fleshing out the interplay between these arenas.

Most research on campaign strategies on traditional and digital channels has focused on visible campaign activities and thus the "front stage." Rone (2023), however, scrutinized the "backstage," analyzing which user data campaign organizations gather, process, and repurpose. Her case study of campaigns around Brexit revealed problematic data practices, not least because data collected in the run-up to the Brexit referendum were later re-used for other campaigns.

Finally, in a commentary piece, Reidy and Suiter (2023) reminded us that, amid public fears about the (negative) impact of social media on referendum campaigns, social media do not constitute the most important source of information for citizens. Moreover, social media users do not skew to the conservative side, which opposes social progress (e.g., abolishment of the ban on abortion). Their commentary also served as a plea to study a referendum campaign beyond the actual hot phase.

4. Studying Referendum Campaigns in Hybrid Media Systems

The studies collected in this thematic issue provide a good indication of the direction in which referendum campaign research has developed recently and should develop further. Complex analyses including the role of tech platforms while still considering the role of news media do justice to the current multi-channel environment. However, as Chadwick (2017) pointed out, studying the hybridity of media systems does not primarily mean contrasting "old" channels with "new" channels separately. Rather, it means studying the ongoing complex interplay between various channels, focusing on information flows, campaign dynamics, and concrete episodes. In Switzerland's frequent referendum campaigns, for instance, one could observe the recent rise of what Chadwick (2017) called "hybrid mobilization movements." One organization, consisting of young people from civil society with (semi-)professional communication and marketing skills, keeps exploiting the various logics the hybrid media system affords. In an interview with one of the guest editors, an activist of this organization in charge of the communication strategy explained the need to create an "infinite loop" in the information flow across various channels through "stunts." This starts, for instance, with a provocative campaign ad, both on social media and on physical billboards located near places where journalists commute to work. Once the ad has triggered media attention, it is then amplified by the organization on its social media channels. Additionally, social media is used for crowdfunding, which is then used to buy advertising space covering the whole front page of Switzerland's largest (free-sheet) newspaper, with the newspaper ad and the debate about it being reused as material on digital channels. While this more qualitative, process-oriented case observation clearly illustrates a hybrid style of campaigning, the challenge for political communication researchers lies in determining whether these kinds of episodes can be generalized and combining qualitative approaches with big data analyses of social media communication.

The published articles in this thematic issue also show that comparisons and analyses across single votes are usually restricted to the case of Switzerland, a paradigmatic case with a longstanding tradition of direct democracy. Given the fact that comparative communication research has many merits and is increasingly applied to election campaigns, scholars should invest more in finding ways to study referendum campaigns across cases, possibly even across countries (e.g., Renwick & Vowles, 2022). Of course, some votes might be too idiosyncratic to allow comparison. However, several votes take place in similar time periods and share characteristics. The issue of abortion, for example, has been on the ballot in several countries and states recently. Further, many countries have regular referendum campaigns on a sub-national level, which allows for comparative analyses. For instance, in the United States, an average of 161 state-wide ballots take place every year, with substantial campaign activity and overall campaign expenditures of roughly one billion USD (Ballotpedia, 2022). We hope that this thematic issue serves as a springboard for more in-depth, systematic, and possibly even comparative research on referendum campaigns in our complex, hybrid media environment.

Acknowledgments

We would like to thank all the authors whose submissions enabled us to compile a topical, insightful thematic issue on studying referendum campaigns in the digital age. We also wish to thank the reviewers for their well-founded, constructive criticism, which was helpful in our selection decisions and in improving the selected articles. Finally, we wish to thank the editorial team of *Media and Communication*, who managed the publication process smoothly and professionally.

Conflict of Interests

The authors declare no conflicts of interest.

References

Arlt, D., Rauchfleisch, A., & Schäfer, M. S. (2018). Between fragmentation and dialogue. Twitter communities and political debate about the Swiss “Nuclear Withdrawal Initiative.” *Environmental Communication*, *6*(5), 1–18. https://doi.org/10.1080/17524032.2018.1430600

Balcells, J., & Padró-Solanet, A. (2020). Crossing lines in the Twitter debate on Catalonia’s independence. *The International Journal of Press/Politics*, *25*(1), 28–52. https://doi.org/10.1177/1940161219858687

Ballotpedia. (2022). *2022 Ballot measures*. https://ballotpedia.org/2022_ballot_measures

Bernhard, L. (2012). *Campaign strategy in direct democracy*. Palgrave Macmillan. https://doi.org/10.1057/9781137011343

Bernhard, L., & Kübler, D. (2023). Do intensive public debates on direct-democratic ballots narrow the gender gap in social media use? *Media and Communication*, *11*(1), 31–42.

Blassnig, S., Mitova, E., Pfiffner, N., & Reiss, M. V. (2023). Googling referendum campaigns: Analyzing online search patterns regarding Swiss direct-democratic votes. *Media and Communication*, *11*(1), 19–30.

Bonfadelli, H., & Friemel, T. N. (2012). Learning and knowledge in political campaigns. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns: Enlightening or manipulating?* (pp. 168–187). Palgrave Macmillan.

Chadwick, A. (2017). The hybrid media system: Politics and power (2nd ed.). In A. Chadwick (Ed.), *Oxford studies in digital politics*. Oxford University Press. http://doi.org/10.1093/oso/9780190696726.001.0001

Cushion, S., & Lewis, J. (2017). Impartiality, statistical tit-for-tats and the construction of balance: UK television news reporting of the 2016 EU referendum campaign. *European Journal of Communication*, *32*(3), 208–223. https://doi.org/10.1177/0267323117695736

Dekavalla, M. (2018). Issue and game frames in the news: Frame-building factors in television coverage of the 2014 Scottish independence referendum. *Journalism*, *19*(11), 1588–1607. https://doi.org/10.1177/1464884916674231

Del Vicario, M., Zollo, F., Caldarelli, G., Scala, A., & Quattrociocchi, W. (2017). Mapping social dynamics on Facebook: The Brexit debate. *Social Networks*, *50*(2), 6–16. https://doi.org/10.1016/j.socnet.2017.02.002

de Vreese, C. H. (2015). Referendum. In G. Mazzoleni (Ed.), *The international encyclopedia of political communication*. Wiley. https://doi.org/10.1002/9781118541555.wbiepc122

Fischer, M., & Gilardi, F. (2023). Level playing field or politics as usual? Equalization–normalization in direct democratic online campaigns. *Media and Communication*, *11*(1), 43–55.

Gaber, I., & Fisher, C. (2021). “Strategic lying”: The case of Brexit and the 2019 U.K. election. *The International Journal of Press/Politics*, *27*(2), 460–477. https://doi.org/10.1177/1940161221994100

Hänggli, R. (2020). *The origin of dialogue in the news media*. *Challenges to democracy in the 21st century series*. Palgrave Macmillan. https://doi.org/10.1007/978-3-030-26582-3

Hopmann, D. N., Wonneberger, A., Shehata, A., & Höijer, J. (2016). Selective media exposure and increasing knowledge gaps in Swiss referendum campaigns. *International Journal of Public Opinion Research*, *28*(1), 73–95. https://doi.org/10.1093/ijpor/edv002

Kriesi, H. (Ed.). (2012). *Political communication in direct democratic campaigns: Enlightening or manipulating?* Palgrave Macmillan.

Langer, A. I., Comerford, M., & McNulty, D. (2019). Online allies and tricky freelancers: Understanding the differences in the role of social media in the campaigns for the Scottish independence referendum. *Political Studies*, *67*(4), 834–854. https://doi.org/10.1177/0032321718811252

Maia, R. C. M. (2009). Mediated deliberation: The 2005 referendum for banning firearm sales in Brazil. *The International Journal of Press/Politics*, *14*(3), 313–334. https://doi.org/10.1177/1940161209337090

Marcinkowski, F., & Donk, A. (2012). The deliberative quality of referendum coverage in direct democracy: Findings from a longitudinal analysis of Swiss media. *Javnost/The Public*, *19*(4), 93–110.

Marquis, L., Schaub, H.-P., & Gerber, M. (2011). The fairness of media coverage in question: An analysis of referendum campaigns on welfare state issues in Switzerland. *Swiss Political Science Review*, *17*(2), 128–163. https://onlinelibrary.wiley.com/doi/full/10.1111/j.1662-6370.2011.02015.x

Nai, A., & Sciarini, P. (2015). Why “going negative?”: Strategic and situational determinants of personal attacks in Swiss direct democratic votes. *Journal of Political Marketing*, 1–31. https://doi.org/10.1080/15377857.2015.1058310

Reidy, T., & Suiter, J. (2023). Does social media use matter? A case of the 2018 Irish abortion referendum. *Media and Communication*, *11*(1), 81–85.

Renwick, A., & Lamb, M. (2013). The quality of referendum debate: The UK’s electoral system referendum in the print media. *Electoral Studies*, *32*(2), 294–304. https://doi.org/10.1016/j.electstud.2012.10.013

Renwick, A., & Vowles, J. (2022). Tales of two referendums: Comparing debate quality between the UK and New Zealand voting system referendums of 2011. *Representation*, *58*(2), 191–210. https://doi.org/10.1080/00344893.2021.1902380

Rinscheid, A. & Udris, L. (2022). Referendum campaigns in Swiss energy policy: A comparative analysis of media coverage and a case study of media influence on voting behavior. In P. Hettich & A. Kachi (Eds.), *Swiss energy governance: Political, economic and legal challenges and opportunities in the energy transition* (pp. 283–312). Springer. https://doi.org/10.1007/978-3-030-80787-0

Rone, J. (2023). Beyond Brexit? Public participation in decision-making on campaign data during and after referendum campaigns. *Media and Communication*, *11*(1), 69–80.

Rychert, M., & Wilkins, C. (2023). Referendum campaigns in hybrid media systems: Insights from the New Zealand cannabis legalisation referendum. *Media and Communication*, *11*(1), 56–68.

Schuck, A., & de Vreese, C. H. (2011). Public support for referendums: The role of the media. *West European Politics*, *34*(2), 181–207. https://doi.org/10.1080/01402382.2011.546566

Udris, L., Eisenegger, M., & Schneider, J. (2016). News coverage about direct-democratic campaigns in a period of structural crisis. *Journal of Information Policy*, *6*, 68–104. https://doi.org/10.5325/jinfopoli.6.2016.0068

van Klingeren, M., Trilling, D., & Möller, J. (2021). Public opinion on Twitter? How vote choice and arguments on Twitter comply with patterns in survey data, evidence from the 2016 Ukraine referendum in the Netherlands. *Acta Politica*, *56*, 436–455. https://doi.org/10.1057/s41269-020-00160-w

Vogler, D., Weston, M., Ryffel, Q., Rauchfleisch, A., Jürgens, P., Eisenegger, M., Schwaiger, L., & Christen, U. (2023). Mobile news consumption and its relation to young adults' knowledge about and participation in referendums. *Media and Communication*, *11*(1), 6–18.

About the Authors

Linards Udris (PhD) is deputy director of research at the Research Center for the Public Sphere and Society and senior research associate in the Department of Communication and Media Research at the University of Zurich, Switzerland. His research focuses on the quality of news, especially during referendum and election campaigns, the concept of the public sphere, and social change. (Photo: © John Flury, obsoquasi.ch)

Mark Eisenegger (PhD) is a full professor in the Department of Communication and Media Research and director of the Research Center for the Public Sphere and Society at the University of Zurich, Switzerland. His work focuses on the digital transformation of the public sphere, the quality of news, and change in organizational communication. (Photo: © John Flury, obsoquasi.ch)

cogitatio

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 6–18
https://doi.org/10.17645/mac.v11i1.6029

Article

Mobile News Consumption and Its Relation to Young Adults' Knowledge About and Participation in Referendums

Daniel Vogler [1,*], Morley Weston [2], Quirin Ryffel [2], Adrian Rauchfleisch [3], Pascal Jürgens [4], Mark Eisenegger [2], Lisa Schwaiger [2], and Urs Christen [1]

[1] Research Center for the Public Sphere and Society, University of Zurich, Switzerland
[2] Department of Communication and Media Research, University of Zurich, Switzerland
[3] Graduate Institute for Journalism, National Taiwan University, Taiwan
[4] Department of Media Studies, University of Trier, Germany

* Corresponding author (daniel.vogler@foeg.uzh.ch)

Submitted: 27 July 2022 | Accepted: 7 November 2022 | Published: 31 January 2023

Abstract
The news media are among the most important sources of information about political events, such as referendums. For young adults, the smartphone has become the main device for accessing news. However, we know little about the factors influencing mobile news consumption and how this consumption is related to political knowledge and political participation. This study investigates the antecedents of young individuals' smartphone news consumption and how it is correlated with their knowledge about and participation in two referendums in Switzerland. We record the mobile internet usage of 309 young adults and link their digital trace data to survey data. We show that trust in news media and the use of broadcast media are positively correlated with the duration of mobile news consumption. The use of social media leads to more news source diversity. However, we find that the duration of mobile news consumption and news source diversity are not correlated with political knowledge about or participation in the referendum. As interest in politics is also positively correlated with the diversity of news sources used by individual participants, our study supports the idea that attentive audiences use a broader range of news sources to inform themselves about referendums.

Keywords
mobile news consumption; news media; referendum; political knowledge; political participation; young adults

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

In democratic societies, news media play an essential role in informing citizens about current political affairs (Andersen et al., 2021; Renwick et al., 2020; Strömbäck, 2008). A well-informed citizenry is considered vital for the political process (Bode et al., 2013; Van Aelst et al., 2017), particularly in direct democratic systems, such as in Switzerland (Linder & Müller, 2021). Information is even more pivotal in the run-up to referendums, in which people often need to vote on complex policy issues, such as energy policy (Rinscheid & Udris, 2022), fiscal policy (Bonfadelli & Friemel, 2011), and insurance reforms (Lupia, 1994). In these direct votes, informed decisions require a substantial amount of information and understanding, lest citizens resort to intuition and affective judgments.

Similar to elections, referendum campaigns are considered special phases in the political process in which political actors increase their activities and attempt to reach the electorate with their messages (Hänggli et al., 2011; Strömbäck & Nord, 2006; Tresch, 2009). The news media have traditionally been the channels through which political actors reach a broad audience (Gerth

et al., 2011). How the news media covers referendum campaigns has therefore received considerable scholarly attention (e.g., Bonfadelli & Friemel, 2011; Dekavalla, 2018; de Vreese & Semetko, 2002; Elenbaas & de Vreese, 2008; Gerth & Siegert, 2012; Jenkins & Mendelsohn, 2001; Udris et al., 2020; Walter, 2019; Wettstein, 2012). The special role of the media during referendum campaigns is reflected in special regulations for media coverage and specific editorial guidelines (Udris & Eisenegger, 2021), as well as normative affordances, such as fairness and diversity in reporting (Cushion & Lewis, 2017; Marquis et al., 2011). Referendums are also phases in which the interest of the electorate in the policy at stake is often high, sometimes even more pronounced than that during elections (Renwick et al., 2020). At least in some cases, we could therefore expect an increase in the supply and demand sides of political communication in the news media during referendum campaigns.

News media are considered the central source of information about politics (Beckers et al., 2021), with studies showing that news consumption positively affects political knowledge (Moeller & de Vreese, 2019) and can influence participation in referendums (Schuck & de Vreese, 2009), attitudes toward referendums (de Vreese & Semetko, 2002; Wettstein, 2012), and even voting decisions (Elenbaas & de Vreese, 2008; Rinscheid & Udris, 2022). However, digitalization has changed the way people consume news. Young people, in particular, primarily rely on smartphones to receive news via specific news usage habits (Chan-Olmsted et al., 2013; Oeldorf-Hirsch & Srinivasan, 2021; Schwaiger et al., 2022; Westlund, 2015). This has led to widespread concerns that young people are undersupplied with political news, which has negative consequences for political knowledge and political participation (Andersen & Strömbäck, 2021; Ohme, 2020; Schneider & Eisenegger, 2018; Van Aelst et al., 2017).

The newly acquired news consumption habits on mobile devices have changed how people access and process information (Beckers et al., 2021). While many studies show a positive effect of using traditional news media (Van Erkel & Van Aelst, 2021), this positive correlation does not hold for mobile news consumption; reading news on mobile devices has been demonstrated to lead to a lower gain of information compared with reading news from offline sources (Andersen & Strömbäck, 2021) but also desktop computers (Ohme et al., 2021). However, despite these prominently articulated concerns, there is still a significant degree of uncertainty regarding the role of mobile news consumption by young adults for their political knowledge and participation.

Although the interactions between news consumption, political knowledge, and political participation have been extensively studied in political communication, empirical evidence for the case of referendums is scarce. One of the reasons for this is that referendums are rare events in many societies, with about half of all global referendums held in Switzerland (Serdült, 2014). Consequently, Switzerland is particularly well suited to studying the antecedents of mobile media use and its effects on political knowledge and political participation in direct democratic voting.

To address the outlined research gaps, we conducted a mobile tracking study in the run-up to a referendum in Switzerland. This allowed us to identify the factors that influence young adults' mobile media use and how it is related to policy surveillance knowledge about the referendum and voting participation.

2. Conceptual Framework

In the following sections, we outline how digitalization affects news consumption and the consequences for political knowledge and political participation.

2.1. Changing News Consumption

Individuals are increasingly receiving a significant portion of news via their smartphones (Ohme, 2020; Westlund, 2015). However, we still know little about the factors that influence news consumption on mobile devices, although these factors are important preconditions for understanding the relationship between mobile news consumption and political knowledge. From the existing literature, we know that trust in news media, consumption of traditional media, and interest in politics determine news usage (Andersen & Strömbäck, 2021). However, we currently do not know whether these factors hold true for young adults' mobile news consumption. We, therefore, analyze the factors that correlate with the duration of news consumption:

> RQ1.1: What factors are correlated with the duration of mobile news consumption?

In addition to a certain quantity of news consumption, a certain diversity of news sources is considered desirable (Joris et al., 2020). When it comes to news source diversity, special attention has been given to the role of social media. The use of social media has been shown to lead to incidental news exposure (Fletcher & Nielsen, 2018; Goyanes & Demeter, 2022). Instead of accessing a specific website for a news consumption session, users receive an algorithmically curated news menu from different sources on their social media feeds. This pattern has been shown to lead to more diverse news consumption, meaning that individuals encounter more different sources (Fletcher & Nielsen, 2018; Scharkow et al., 2020). Thus, we investigate the factors that correlate with the diversity of news consumption and assume that higher social media usage leads to more diverse news consumption:

> RQ1.2: What factors are correlated with the source diversity of mobile news consumption?

H1: Social media consumption is positively correlated with the source diversity of mobile news consumption.

2.2. News Consumption and Political Knowledge

Extant research seems to present a clear picture of a positive relationship between offline and online news consumption and political knowledge (e.g., Kenski & Stroud, 2006; Ohme, 2020; Van Erkel & Van Aelst, 2021; Wei & Lo, 2008). However, these results are being challenged by recent empirical findings indicating that higher news use does not always lead to greater knowledge about current political events (e.g., Castro et al., 2021; Dimitrova et al., 2011; Moeller & de Vreese, 2019; Strömbäck et al., 2018). While research on direct democratic referendum campaigns has intensified in recent years, most of these studies have focused on citizens' opinion formation processes (for an overview, see Kriesi, 2011), whereas research on media use and knowledge about, and participation in, referendums remains very scarce. The results of a study by Bonfadelli and Friemel (2011) on three referendums in Switzerland reported rather limited effects of news media as information sources for knowledge acquisition.

Mobile news consumption has been evaluated as ambiguous when it comes to acquiring political information. It has been shown to have less beneficial effects on information gain compared with reading news from offline sources (Andersen & Strömbäck, 2021). Ohme et al. (2021) reported that people learn less when consuming news on their smartphones than when doing so on desktop computers. This has been traced back to different habits when accessing news through mobile devices. On a smartphone, the news is consumed in shorter sessions, so-called "snacking," often on the go and only via headlines (Molyneux, 2018).

Many studies measure political knowledge with general questions about the political system (e.g., Moeller & de Vreese, 2019). As referendums are policy centred, they require the acquisition of novel and specific knowledge, even by politically highly educated people. Therefore, the results on the effects of news consumption on general political knowledge might not be true for knowledge about referendums. In the Swiss political system, with referendums being held every few months, people are continuously engaged with political information if they participate in the political process. Therefore, we focus on the concept of policy surveillance knowledge (Barabas et al., 2014; Van Erkel & Van Aelst, 2020). As defined by Barabas et al. (2014), policy surveillance knowledge includes any kind of policy information that is not older than 100 days. It is distinct from knowledge about static general facts on processes and institutions of politics, which are often acquired once, usually in school. We assume that specific knowledge about referendums is often obtained through news media. Dimitrova et al. (2011), for instance, showed that news website use during campaign time predicts knowledge gains. Therefore, we assume a positive effect of the duration and source diversity of news consumption on policy surveillance knowledge:

H2.1: The duration of mobile news consumption is positively correlated with policy surveillance knowledge.

H2.2: The source diversity of mobile news consumption is positively correlated with policy surveillance knowledge.

In numerous studies, political interest has been shown to influence political knowledge (Barabas et al., 2014; Van Erkel & Van Aelst, 2021). It has also been shown to affect news consumption. Therefore, we test whether political interest is positively related to political knowledge:

H2.3: Political interest is positively correlated with policy surveillance knowledge.

2.3. News Consumption and Political Participation in Referendums

Media use is considered an important predictor of political participation, as it can raise awareness of political issues, foster conversations about politics, and increase individuals' political knowledge and participation (Andersen et al., 2016; Shah et al., 2005; Strömbäck et al., 2018). At the national level, the Swiss electorate can, on average, participate in more than nine referendums each year (Serdült, 2014). Therefore, Switzerland is an interesting case for studying the effects of mobile news consumption on political participation. The findings obtained in a context in which direct democratic means are regularly used, and are strongly established, are arguably more valid when direct democratic voting is not exceptional, and in turn, more dependent on contextual factors (Goldberg & Sciarini, 2021). The focus of empirical studies on the effects of media use on political participation has so far been predominantly the role of traditional journalistic mass media, especially television and print newspapers (Grill, 2020). Empirical meta-analyses in various Western democracies have found an overall positive correlation between different forms and types of media use and political participation (Boulianne, 2009, 2015, 2020; Boulianne & Theocharis, 2020; Kanervo et al., 2005). Although research to date shows that there are many nuances regarding the type and mix of media use (Strömbäck et al., 2018), the overall pattern is that media use is positively correlated with political participation (Boulianne, 2015; Kanervo et al., 2005). In an analysis of 24 studies based on survey data gathered in the US, the UK, the Netherlands, Denmark, and Belgium, Kanervo et al. (2005) found that print newspaper use is positively related to political participation,

whereas television entertainment viewing is negatively linked to political participation. Meta-analyses have shown a substantial positive relationship between digital media use and political engagement (Boulianne & Theocharis, 2020), as well as social media use and political participation (Boulianne, 2015, 2020). Despite the growing importance and use of referendums around the globe (Qvortrup, 2014), the influence of media use on participation in direct democratic votes has received little scholarly attention (Goldberg & Sciarini, 2021). Some studies have found mobilizing effects of news coverage for certain electorate subgroups. In their study of the 2005 Dutch EU Constitution referendum campaign, Schuck and de Vreese (2008) showed that exposure to referendum news has a mobilizing effect on those opposing the proposal. For a referendum on energy policy in Switzerland, Rinscheid and Udris (2022) found (de)mobilizing effects of news coverage depending on its tonality and voters' party preferences. Regarding the effects of mobile news usage on political campaign participation, a recent study, that combined smartphone-based media diaries and panel survey data among Danish voters, showed divergent effects (Ohme, 2020). Whether the correlation between news consumption and political participation also holds true in the case of referendums and the use of news on mobile devices remains an open question. Focusing on digital media, Dimitrova et al. (2011) found that the use of some digital media forms, especially social media, during political campaigns has appreciable effects on offline participation, such as visiting campaign rallies and trying to convince others to vote for a specific party. In line with these findings, we assume that the intensity and source diversity of mobile news consumption is positively correlated with participation in the referendum:

> H3.1: The duration of mobile news consumption is positively correlated with participation in the referendum.

> H3.2: The source diversity of mobile news consumption is positively correlated with participation in the referendum.

In the literature, different predictors of political voting participation can be identified at the individual level. As for numerous other political behaviours, such as voting in elections (Prior, 2010), political interest has been shown to be the strongest predictor of participation in direct democratic voting (Linder & Müller, 2021). Therefore, we postulate that political interest positively correlates with referendum participation:

> H3.3: Political interest is positively correlated with participation in the referendum.

Furthermore, panel study findings from the US (e.g., Cho et al., 2009), as well as from the Netherlands and Denmark (Andersen et al., 2016), show that in the context of elections, and in routine political periods, the effects of online media use on political participation are mediated by individuals' political knowledge. Therefore, we assume that policy surveillance knowledge is positively correlated with participation in referendums:

> H3.4: Policy surveillance knowledge is positively correlated with participation in the referendum.

3. Methods

The study combines digital trace data on mobile media consumption with participant surveys. Young adults between 18- and 24-years-old living in Switzerland were eligible to participate. The study was conducted from September 13, 2021, to October 4, 2021. As a reward for joining the study, the participants could choose between 50 francs in cash or a voucher for 60 francs from various online stores.

3.1. Recruiting

The participants were recruited primarily via paid social media ads on Instagram (73% of the participants) and Facebook (3% of the participants). The remaining 24% were recruited via mailing lists. In total, 1,029 people clicked on the recruitment advertisement and began the sign-up process. The installation process was quite complex, involving the installation of a virtual private network (VPN) app, a certification authority certificate, and a connection key to our VPN servers—a process that not all participants were able or willing to perform. Only 772 participants set up the connection to our server and sent at least one line of tracking data. The study required the respondents to keep their VPNs on for the three weeks of the study. However, many were not able to complete this requirement. In total, 309 met the study requirements, submitting at least 13 days' worth of data and completing the surveys at the beginning and end of the tracking period. As data on age and native language were collected at the beginning of the study, we can estimate how representative the dropouts were of the potential participant population as a whole. While the dropout rate by language was approximately proportional, all 18-year-olds dropped out of the study. Other ages remained approximately proportional.

The panel of participants is not fully representative of the population of young adults in Switzerland. The participants were 66% female and 34% male, and their average age was 21.3 years. Students were overrepresented in the panel at 75%. Twenty per cent of the participants were completing an apprenticeship or had permanent jobs, and 5% were pupils. Of the respondents, 77% lived in German-speaking Switzerland, whereas 23% lived in the French-speaking region. Despite some skew, the sample represented a significant amount of variation across socio-demographic and regional variables

and should support robust regression analyses, especially with controls.

3.2. Mobile Tracking

The study participants agreed to connect their smartphones to an encrypted connection—a VPN created specifically for the study. To do so, they had to complete a multistep installation process. Once the respondents were connected, all traffic was routed through our research servers. Personal identifying information was pruned before storage. We stored the URLs and the access times and dates, and then we assigned these to anonymous user IDs. For the study, only the websites' domains and not the full URLs were recorded. To link the digital trace data to the survey data in an anonymized manner, we followed the procedure of Jürgens et al. (2020). The entire procedure was reviewed and approved by the ethics committee of the University of Zurich.

The tracking resulted in a dataset of 10.4 million views attributed to approximately 57,000 individual domains. The domains of news media websites were then identified automatically by comparing the captured domains with a comprehensive list (n = 3,778) of news media websites retrieved from Media Cloud. We checked the list manually and added missing Swiss outlets. The domains of social media platforms were also identified with a list (n = 13). Minutes per domain were defined as the main measure. Thus, we were able to determine the number of minutes a user spent on news media websites (duration of news usage) or social media platforms (duration of social media usage), as well as how many different news outlets a user visited over the entire period of the study, which we defined as the source diversity of news usage (sometimes also referred to as "richness").

3.3. Survey

The participants had to complete an online questionnaire before and after the tracking study. In addition to sociodemographic variables, such as age, gender, and education, we asked the respondents about their interest in politics (national and international), sports, and soft news. We asked them about their use of offline newspapers and broadcast media (TV and radio), their trust in the news media, and the extent to which they used social media to inform themselves. Using a binary variable, we also captured whether the participants joined the referendums.

The study was conducted in the run-up to a voting weekend. Voters had to decide on referendums on higher taxes for companies (the 99% initiative) and the legalization of same-sex marriages. We followed Moeller and de Vreese (2019) in measuring political knowledge, and we provided the participants with five statements per referendum in the survey after the referendum took place. We developed statements based on referendum-related events covered in the news media, websites from official committees supporting or opposing the referendum, and the official information brochure of the Federal Council, which was sent to all voters. The statements referred to the content and claims of the referendum, as well as to the positioning of actors (e.g., "The Federal Council recommends voting 'yes' for the 99% initiative"). This allowed us to capture policy surveillance knowledge (Barabas et al., 2014), which differs from knowledge about political processes and institutions in Switzerland. Six of the statements on the referendum used in the questionnaire were correct, and four were incorrect. The participants had to decide whether the statements were true or false. They could indicate whether they were certain, presumably certain, or undecided. We scored the correctly answered items with one point. Correct answers included all cases in which the participants chose the correct answer and indicated that they were certain or presumably certain about it. We then identified the respondents' knowledge level by estimating a Bayesian two-parameter logistic IRT model with the R package brms (Bürkner, 2019). Typically used in education science, this model considers both the difficulty and the discrimination power of each item and allows us to estimate a more nuanced ability level.

All variables were calculated at the user level (n = 309). To test our hypotheses, we used different types of regression models, all estimated as Bayesian regression models with brms in R. For all models, we used four chains with 4,000 iterations in total and 1,000 warm-up iterations. All chains converged, and the Rhat values were all 1. All predictor variables were scaled where appropriate.

4. Results

Using a linear regression model, we showed that neither the duration of social media use (β = .07, 95% CI [−.04, .18]) nor self-reported social media use for information purposes (β = −.07, 95% CI [−.18, .04]) is correlated with the duration of mobile news usage (see Table 1). The same is true for political interest (β = .06, 95% CI [−.05, .17]). However, a high interest in sports is positively correlated with the duration of mobile news consumption (β = .13, 95% CI [.02, .24]). Individuals with higher trust in news media use news more frequently (β = .19, 95% CI [.08, .30]). The self-reported intensity of radio and television use (β = .15, 95% CI [.04, .26]) is also correlated with higher news consumption. The usage duration is higher for men than for women (β = .54, 95% CI [.30, .78]). No effects on usage duration are shown for education (β = .13, 95% CI [− .12, .37]) and age (β = .09, 95% CI [− .02, .20]).

Social media usage is positively correlated with the source diversity of news usage, which we define as the number of sources an individual visited during the study (incidence rate ratio [IRR] = 1.14, 95% CI [1.06, 1.24]),

Table 1. Regression models for the duration and source diversity of news consumption.

	Duration of news consumption		Source diversity of news consumption	
	Estimates (β)	CI (95%)	Incidence rate ratios (IRR)	CI (95%)
Intercept	−0.28	−0.52 to −0.05	12.52	10.71–14.72
Gender: male	0.54	0.30 to 0.78	1.34	1.14–1.58
Higher education: yes	0.13	−0.12 to 0.37	0.99	0.84–1.18
Age at survey	0.09	−0.02 to 0.20	1.07	1.00–1.15
Political interest	0.06	−0.05 to 0.17	1.11	1.03–1.20
Interest in sports	0.13	0.02 to 0.24	0.94	0.88–1.02
Interest in soft news	0.03	−0.08 to 0.15	1.03	0.95–1.11
Trust in news media	0.19	0.08 to 0.30	1.06	0.98–1.15
Newspaper usage	−0.03	−0.13 to 0.08	1.04	0.97–1.12
Broadcast usage	0.15	0.04 to 0.26	1.03	0.95–1.11
Duration of social media consumption	0.07	−0.04 to 0.18	1.14	1.06–1.24
Use of social media for information	−0.07	−0.18 to 0.04	0.99	0.92–1.07
n	309		309	
R^2 Bayes	0.196		0.184	

Notes: For diversity, a negative binomial regression model is used; β and IRR are shown with 95% credible intervals.

supporting H1 (see Table 1). By contrast, no correlation is found between the self-reported use of social media for information purposes and news source diversity (IRR = .99, 95% CI [.92, 1.07]). The use of newspapers (IRR = 1.04, 95% CI [.97, 1.12]) or broadcast media (IRR = 1.03, 95% CI [.95, 1.11]), as well as trust in the news media (IRR = 1.06, 95% CI [.98, 1.15]), is also not correlated with the source diversity of mobile news usage. However, individuals with higher political interest show a higher news source diversity than individuals with lower political interest (IRR = 1.11, 95% CI [1.03, 1.20]). Interest in sports (IRR = .94, 95% CI [.88, 1.02]) or soft news (IRR = 1.03, 95% CI [.95, 1.11]) is not related to more diverse mobile news usage. Furthermore, news source diversity is higher for men than for women (IRR = 1.34, 95% CI [1.14, 1.58]). No correlation is found between age (IRR = 1.07, 95% CI [1.00, 1.15]) and education (IRR = .99, 95% CI [.84, 1.18]). Gender and trust in news media are the strongest predictors of the duration of news consumption. For the source diversity of news consumption, however, gender is the strongest predictor, followed by the duration of social media consumption.

A linear regression model shows that neither the duration (β = .00, 95% CI [−.12, .12]) nor the source diversity (β = .04, 95% CI [−.08, .16]) of news consumption is correlated with policy surveillance knowledge (see Table 2). Therefore, the data do not support H2.1 and 2.2. By contrast, the respondents with higher political interest have higher policy surveillance knowledge (β = .32, 95% CI [.21, .43]), thus supporting H2.3. The duration

Table 2. Regression model for policy surveillance knowledge.

	Policy surveillance knowledge	
	Estimates (β)	CI (95%)
Intercept	−0.28	−0.52 to −0.04
Gender: male	0.16	−0.09 to 0.40
Higher education: yes	0.30	0.05 to 0.55
Age at survey	−0.03	−0.13 to 0.08
Political interest	0.32	0.21 to 0.43
Interest in sports	−0.20	−0.31 to −0.09
Interest in soft news	0.05	−0.06 to 0.17
Duration of news consumption	0.00	−0.12 to 0.12
Source diversity of news consumption	0.04	−0.08 to 0.16
Newspaper usage	0.08	−0.03 to 0.18
Broadcast usage	0.08	−0.03 to 0.20
Duration of social media consumption	−0.09	−0.20 to 0.02
Use of social media for information	−0.05	−0.16 to 0.05
n	309	
R^2 Bayes	0.223	

Note: β is shown with 95% credible intervals.

of social media usage (β = −.09, 95% CI [−.20, .02]) and the self-reported social media usage for information purposes (β = .05, 95% CI [−.16, .05]) are not correlated with policy surveillance knowledge. Individuals who report often consuming offline news via printed newspapers (β = .08, 95% CI [−.03, .18]) and radio or television (β = .08, 95% CI [−.03, .20]) do not have higher policy surveillance knowledge. Interest in sports correlates negatively with policy surveillance knowledge (β = .20, 95% CI [−.31, −.09]). There is no such effect for interest in soft news (β = .05, 95% CI [−.06, .17]). Furthermore, educational attainment is positively correlated with policy surveillance knowledge (β = .30, 95% CI [.05, .55]). No correlation has been measured for gender (β = .16, 95% CI [−.09, .40]) and age (β = −.03, 95% CI [−.13, .08]). Educational attainment and political interest are clearly the strongest predictors of policy surveillance knowledge.

Neither the duration (odds ratio [OR] = .98, 95% CI [.95, 1.01]) nor the source diversity (OR = 1.01, 95% CI [.98, 1.04]) of news consumption is correlated with participation in the referendum (see Table 3). Therefore, the data do not support H3.1 and H3.2. In line with our assumptions for H3.3 and H3.4, political interest (OR = 1.36, 95% CI [1.02, 1.81]) and policy surveillance knowledge (OR = 1.57, 95% CI [1.19, 2.10]), which are the strongest predictors in our model, are positively correlated with participation in the vote. No correlation with the likelihood to vote is found for interest in sports (OR = 1.01, 95% CI [.77, 1.35]), interest in soft news (OR = 1.09, 95% CI [.83, 1.45]), the use of newspapers (OR = 1.06, 95% CI [.82, 1.38]) and broadcast media (OR = 1.09, 95% CI [.83, 1.44]), the duration of social media usage (OR = 1.24, 95% CI [.95, 1.66]), the self-reported usage of social media for information purposes (OR = 1.03, 95% CI [.79, 1.33]), age (OR = 1.07, 95% CI [.82, 1.38]), gender (OR = .77, 95% CI [.42, 1.38]), and education (OR = 1.30, 95% CI [.72, 2.38]).

5. Discussion and Conclusion

This study has shown differentiated results on the duration and source diversity of mobile news usage among young adults in the run-up to two referendums in Switzerland. Duration of use is positively correlated with media trust and the use of broadcast media. The two factors show a correlation between mobile news consumption and the use of traditional media channels and a positive attitude toward media in general.

Social media usage is positively correlated with the source diversity of mobile news consumption. Thus, young individuals who frequently use social media on their smartphones have a more diverse news repertoire than those with lower social media consumption. An explanation for this finding can be found in the literature on incidental news exposure (Goyanes & Demeter, 2022). On social media, users are exposed to posts from a wide variety of sources on their feeds, which can also include news. Investigating the kinds of posts that are fed via these feeds and whether following the accounts of news outlets on social media makes a difference would be interesting future research directions.

The data also show that mobile news consumption depends on users' interests. People interested in politics do not necessarily inform themselves more frequently in the run-up to votes, but they do so via more different channels than people who are not very interested in politics. The opposite is true for interest in sports, which is positively associated with the duration of news consumption but not with the diversity of sources. We do not

Table 3. Binary logistic regression model for participation in the referendum.

	Voting in the referendum	
	Odds ratios (ORs)	CI (95%)
Intercept	1.66	0.85–3.19
Gender: male	0.77	0.42–1.38
Higher education: yes	1.30	0.72–2.38
Age at survey	1.07	0.82–1.38
Political interest	1.36	1.02–1.81
Interest in sports	1.01	0.77–1.34
Interest in soft news	1.09	0.83–1.45
Duration of news consumption	0.98	0.95–1.01
Source diversity of news consumption	1.01	0.98–1.04
Newspaper usage	1.06	0.82–1.38
Broadcast usage	1.09	0.83–1.44
Duration of social media consumption	1.24	0.95–1.66
Use of social media for information	1.03	0.79–1.33
Policy surveillance knowledge	1.57	1.19–2.10
n	309	
R^2 Bayes	0.122	

Note: Odds ratios are shown with 95% credible intervals.

know whether the participants interested in the topic mainly consumed sports news or a more diverse news repertoire, including political news. However, as sports play a substantial role in the output of most news outlets (Vogler, 2021), further studying the role of sports interest in news consumption would be worthwhile.

Our study finds no association between mobile news consumption and political surveillance knowledge about the two referendums. One possible explanation for this finding might be the very little time that the participants dedicate to reading the news. The seven minutes that young adults spend, on average, consuming news on their mobile phones might be too little to have an influence on their acquisition of political knowledge. These results also confirm scholarship, which takes a critical stance against the possibility of information acquisition through mobile devices (Andersen & Strömbäck, 2021; Ohme, 2020). Our study provides some evidence against the displacement model of legacy media by social media. The findings also echo a recent meta-study, which showed that research finds only small to nonexistent relations between social media usage and political knowledge (Amsalem & Zoizner, 2022). Thus, the authors conclude "that the contribution of social media toward a more politically informed citizenry is minimal" (Amsalem & Zoizner, 2022, p. 1).

Furthermore, our findings suggest that factors other than mobile news usage are important for acquiring political knowledge. We found that interest in politics is positively correlated with policy surveillance knowledge about the two referendums, and participation in the referendum. As interest in politics is also positively correlated with the diversity of sources used by individual participants, our study supports the idea that attentive audiences use a broader range of news sources to inform themselves about referendums.

We also want to point out that our study design implicitly followed the assumption that people who simply consume higher quantities of news have higher political knowledge and are more likely to participate in the referendum. Although this assumption is supported by some studies (e.g., Van Erkel & Van Aelst, 2021), we must be aware that looking merely at the quantity of news media consumption on mobile phones will not make us grasp all information seeking, going on during referendum campaigns. Policy surveillance knowledge about a specific referendum must be acquired within a limited time during the campaign. Of course, frequent news users are also more likely to consume information about the referendum. However, we must admit that information about the vote can also be acquired within a short time and be very targeted by reading a few articles or social media posts on the referendum before deciding how to vote, especially when voters are used to routinely fulfilling the task of voting in referendums, such as in Switzerland. Thus, predispositions, such as political interest, political preferences, and attitudes, are most probably important intervening factors between news media consumption or social media usage, and political knowledge or participation. This assumption is, to some extent, supported by existing research that also points at media effects only for subgroups of the electorate (Rinscheid & Udris, 2022; Schuck & de Vreese, 2009).

Our findings seem difficult to generalize. Switzerland is a compelling case for studying referendums because of their frequent occurrence in the country. However, referendums are routinely dealt with by voters, and participation is rather low in most cases. For the analyzed cases of same-sex marriage (52.6%) and taxation (52.2%), about half of the population eligible to vote participated in the referendums. This raises the question of how special referendum campaigns in Switzerland really are. The frequent occurrence and routine handling by voters might also have effects on information-seeking patterns, including simple heuristics or shortcuts (Christin et al., 2002; Lupia, 1994). These patterns may be difficult to capture with quantitative studies, such as ours. In other countries, referendums are more likely to be special phases, and the turnout is usually significantly higher (e.g., the voter turnout in the Brexit referendum was 72.2%). Our study might be, to some extent, generalizable to countries where referendums also take place regularly, such as Denmark and Ireland.

5.1. Limitations

While this study was able to show an accurate picture of mobile news use, this focus is, at the same time, its greatest limitation. We measured only the relationship between mobile news consumption and political knowledge. Information on voting can possibly be obtained via other channels. Young adults also use online news via other devices, such as desktop computers or offline sources (e.g., newspapers and television). Furthermore, conversations with peers and family are central sources of information for young people (Schwaiger et al., 2022).

Another limitation concerns the granularity of the tracking data. For this study, we tracked only the domains, not the full URLs. Thus, we can determine which media outlets were visited by the participants but not which content they looked at. Thus, future studies on media consumption and policy surveillance knowledge could determine whether participants used content related to the referendums under investigation.

We also encourage future studies to focus on the indirect effects of smartphone usage on political participation. Past research has shown that personal–psychological variables, such as internal political efficacy, cognitive reflection, and political face-to-face discussion, can play an important role as mediators of the effect of news media use on political participation (Andersen et al., 2016; Jung et al., 2011). We did not account for such effects in our study.

We also did not gain any insight into the social media feeds of the participants. We knew whether and how long a social media platform was used but not which

content was consumed. Our tracking started when the participants clicked on a news item on their social media feed. However, we cannot determine the overall importance of news on the participants' feeds, for example, whether they follow news media accounts or read article headlines. Tracking social media content would require a more invasive method and would thus violate the terms of use of most platforms. Therefore, our study points once more to the importance of researchers' access to social media data.

Acknowledgments

This work was supported by the Swiss National Science Foundation (grant number 197518).

Conflict of Interests

The authors declare no conflict of interests.

References

Amsalem, E., & Zoizner, A. (2022). Do people learn about politics on social media? A meta-analysis of 76 studies. *Journal of Communication*. Advance online publication. https://doi.org/10.1093/joc/jqac034

Andersen, K., Bjarnøe, C., Albæk, E., & de Vreese, C. H. (2016). How news type matters: Indirect effects of media use on political participation through knowledge and efficacy. *Journal of Media Psychology*, *28*(3), 111–122. https://doi.org/10.1027/1864-1105/a000201

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*. Routledge. https://doi.org/10.4324/9781003111498

Andersen, K., & Strömbäck, J. (2021). Media platforms and political learning: The democratic challenge of news consumption on computers and mobile devices. *International Journal of Communication*, *15*, 300–319.

Barabas, J., Jerit, J., Pollock, W., & Rainey, C. (2014). The question(s) of political knowledge. *American Political Science Review*, *108*(4), 840–855. https://doi.org/10.1017/S0003055414000392

Beckers, K., Van Aelst, P., Verhoest, P., & D'Haenens, L. (2021). What do people learn from following the news? A diary study on the influence of media use on knowledge of current news stories. *European Journal of Communication*, *36*(3), 254–269. https://doi.org/10.1177/0267323120978724

Bode, L., Edgerly, S., Sayre, B., Vraga, E. K., & Shah, D. V. (2013). Digital democracy: How the internet has changed politics. In A. N. Valdivia (Ed.), *The international encyclopedia of media studies* (pp. 1–20). Blackwell. https://doi.org/10.1002/9781444361506.wbiems128

Bonfadelli, H., & Friemel, T. N. (2011). Learning and knowledge in political campaigns. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns: Challenges to democracy in the 21st century series* (pp. 168–187). Palgrave Macmillan. https://doi.org/10.1057/9780230343214_11

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

Boulianne, S. (2020). Twenty years of digital media effects on civic and political participation. *Communication Research*, *47*(7), 947–966. https://doi.org/10.1177/0093650218808186

Boulianne, S., & Theocharis, Y. (2020). Young people, digital media, and engagement: A meta-analysis of research. *Social Science Computer Review*, *38*(2), 111–127. https://doi.org/10.1177/0894439318814190

Bürkner, P. C. (2019). Bayesian item response modeling in R with brms and Stan. *arXiv*. https://doi.org/10.48550/arXiv.1905.09501

Castro, L., Strömbäck, J., Esser, F., Van Aelst, P., de Vreese, C., Aalberg, T., Cardenal, A. S., Corbu, N., Hopmann, D. N., Koc-Michalska, K., Matthes, J., Schemer, C., Sheafer, T., Splendore, S., Stanyer, J., Stępińska, A., Štětka, V., & Theocharis, Y. (2021). Navigating high-choice European political information environments: A comparative analysis of news user profiles and political knowledge. *The International Journal of Press/Politics*, *27*(4), 1–33. https://doi.org/10.1177/19401612211012572

Chan-Olmsted, S., Rim, H., & Zerba, A. (2013). Mobile news adoption among young adults: Examining the roles of perceptions, news consumption, and media usage. *Journalism & Mass Communication Quarterly*, *90*(1), 126–147. https://doi.org/10.1177/1077699012468742

Cho, J., Shah, D. V., Mcleod, J. M., Mcleod, D. M., Scholl, R. M., & Gotlieb, M. R. (2009). Campaigns, reflection, and deliberation: Advancing an O-S-R-O-R model of communication effects. *Communication Theory*, *19*(1), 66–88. https://doi.org/10.1111/j.1468-2885.2008.01333.x

Christin, T., Hug, S., & Sciarini, P. (2002). Interests and information in referendum voting: An analysis of Swiss voters. *European Journal of Political Research*, *41*(6), 759–776. https://doi.org/10.1111/1475-6765.t01-1-00030

Cushion, S., & Lewis, J. (2017). Impartiality, statistical tit-for-tats and the construction of balance: UK television news reporting of the 2016 EU referendum campaign. *European Journal of Communication*, *32*(3), 208–223. https://doi.org/10.1177/0267323117695736

Dekavalla, M. (2018). Issue and game frames in the news: Frame-building factors in television coverage of the 2014 Scottish independence referendum. *Journalism*, *19*(11), 1588–1607. https://doi.org/10.1177/1464884916674231

de Vreese, C. H., & Semetko, H. A. (2002). Cynical and engaged: Strategic campaign coverage, public opinion, and mobilization in a referendum. *Communication Research*, *29*(6), 615–641. https://doi.org/10.1177/009365002237829

Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2011). The effects of digital media on political knowledge and participation in election campaigns: Evidence from panel data. *Communication Research*, *41*(1), 95–118. https://doi.org/10.1177/0093650211426004

Elenbaas, M., & de Vreese, C. H. (2008). The effects of strategic news on political cynicism and vote choice among young voters. *Journal of Communication*, *58*(3), 550–567. https://doi.org/10.1111/j.1460-2466.2008.00399.x

Fletcher, R., & Nielsen, R. K. (2018). Are people incidentally exposed to news on social media? A comparative analysis. *New Media & Society*, *20*(7), 2450–2468. https://doi.org/10.1177/1461444817724170

Gerth, M. A., Dahinden, U., & Siegert, G. (2011). Coverage of the campaigns in the media. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns: Challenges to democracy in the 21st century series* (pp. 108–124). Palgrave Macmillan. https://doi.org/10.1057/9780230343214_8

Gerth, M. A., & Siegert, G. (2012). Patterns of consistence and constriction: How news media frame the coverage of direct democratic campaigns. *American Behavioral Scientist*, *56*(3), 279–299. https://doi.org/10.1177/0002764211426326

Goldberg, A. C., & Sciarini, P. (2021). Voter turnout in direct democracy: A joint analysis of individual, referendum and community factors. *European Journal of Political Research*. Advance online publication. https://doi.org/10.1111/1475-6765.12493

Goyanes, M., & Demeter, M. (2022). Beyond positive or negative: Understanding the phenomenology, typologies and impact of incidental news exposure on citizens' daily lives. *New Media & Society*, *24*(3), 760–777. https://doi.org/10.1177/1461444820967679

Grill, C. (2020). Politische Partizipation und das Wirkungsspiel der Medien [Political participation and the impact of the media]. In I. Borucki, K. Kleinen-von Königslöw, S. Marschall, & T. Zerback (Eds.), *Handbuch politische Kommunikation* (pp. 1–14). Springer. https://doi.org/10.1007/978-3-658-26242-6_43-1

Hänggli, R., Bernhard, L., & Kriesi, H. (2011). Construction of the frames. In H. Kriesi (Ed.) *Political communication in direct democratic campaigns. Challenges to democracy in the 21st century series* (pp. 69–81). Palgrave Macmillan. https://doi.org/10.1057/9780230343214_5

Jenkins, R., & Mendelsohn, M. (2001). The news media and referendums. In M. Mendelsohn & A. Parkin (Eds.), *A referendum democracy* (pp. 211–230). Palgrave Macmillan.

Joris, G., De Grove, F., Van Damme, K., & De Marez, L. (2020). News diversity reconsidered: A systematic literature review unraveling the diversity in conceptualizations. *Journalism Studies*, *21*(13), 1893–1912. https://doi.org/10.1080/1461670X.2020.1797527

Jung, N., Kim, Y., & de Zúñiga, H. G. (2011). The mediating role of knowledge and efficacy in the effects of communication on political participation. *Mass Communication and Society*, *14*(4), 407–430. https://doi.org/10.1080/15205436.2010.496135

Jürgens, P., Stark, B., & Magin, M. (2020). Two half-truths make a whole? On bias in self-reports and tracking data. *Social Science Computer Review*, *38*(5), 600–615. https://doi.org/10.1177/0894439319831643

Kanervo, E., Zhang, W., & Sawyer, C. (2005). Communication and democratic participation: A critical review and synthesis. *Review of Communication*, *5*(4), 193–236. https://doi.org/10.1080/15358590500422585

Kenski, K., & Stroud, N. J. (2006). Connections between internet use and political efficacy, knowledge, and participation. *Journal of Broadcasting & Electronic Media*, *50*(2), 173–192. https://doi.org/10.1207/s15506878jobem5002_1

Kriesi, H. (2011). Political communication: An integrated approach. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns: Enlightening or manipulating?* (pp. 1–16). Palgrave Macmillan. https://doi.org/10.1057/9780230343214_1

Linder, W., & Müller, S. (2021). *Swiss democracy: Possible solutions to conflict in multicultural societies*. Palgrave McMillan. https://doi.org/10.1007/978-3-030-63266-3

Lupia, A. (1994). Shortcuts versus encyclopedias: Information and voting behavior in California insurance reform elections. *American Political Science Review*, *88*(1), 63–76. https://doi.org/10.2307/2944882

Marquis, L., Schaub, H. P., & Gerber, M. (2011). The fairness of media coverage in question: An analysis of referendum campaigns on welfare state issues in Switzerland. *Swiss Political Science Review*, *17*(2), 128–163. https://doi.org/10.1111/j.1662-6370.2011.02015.x

Moeller, J., & de Vreese, C. (2019). Spiral of political learning: The reciprocal relationship of news media use and political knowledge among adolescents. *Communication Research*, *46*(8), 1078–1094. https://doi.org/10.1177/0093650215605148

Molyneux, L. (2018). Mobile news consumption. *Digital Journalism*, *6*(5), 634–650. https://doi.org/10.1080/21670811.2017.1334567

Oeldorf-Hirsch, A., & Srinivasan, P. (2021). An unavoidable convenience: How post-millennials engage with

the news that finds them on social and mobile media. *Journalism: Theory, Practice & Criticism*, *23*(9), 1939–1954. https://doi.org/10.1177/1464884921990251

Ohme, J. (2020). Mobile but not mobilized? Differential gains from mobile news consumption for citizens' political knowledge and campaign participation. *Digital Journalism*, *8*(1), 103–125. https://doi.org/10.1080/21670811.2019.1697625

Ohme, J., Maslowska, E., & Mothes, C. (2021). Mobile news learning—Investigating political knowledge gains in a social media newsfeed with mobile eye tracking. *Political Communication*. Advance online publication. https://doi.org/10.1080/10584609.2021.2000082

Prior, M. (2010). You've either got it or you don't? The stability of political interest over the life cycle. *The Journal of Politics*, *72*(3), 747–766. https://doi.org/10.1017/S0022381610000149

Qvortrup, M. (2014). Referendums in Western Europe. In M. Qvortrup (Ed.), *Referendums around the world: The continued growth of direct democracy* (pp. 43–64). Palgrave Macmillan. https://doi.org/10.1057/9781137314703_3

Renwick, A., Palese, M., & Sargeant, J. (2020). Information in referendum campaigns: How can it be improved? *Representation*, *56*(4), 521–537. https://doi.org/10.1080/00344893.2019.1661872

Rinscheid, A., & Udris, L. (2022). Referendum campaigns in Swiss energy policy. In P. Hettich & A. Kachi (Eds.), *Swiss energy governance* (pp. 283–312). Springer. https://doi.org/10.1007/978-3-030-80787-0_12

Scharkow, M., Mangold, F., Stier, S., & Breuer, J. (2020). How social network sites and other online intermediaries increase exposure to news. *Proceedings of the National Academy of Sciences*, *117*(6), 2761–2763. https://doi.org/10.1073/pnas.1918279117

Schneider, J., & Eisenegger, M. (2018). Newsrepertoires junger Erwachsener [News repertoires of young adults]. In N. Gonser (Ed.), *Der öffentliche (Mehr-) Wert von Medien* [The public (added) value of media] (pp. 93–107). Springer. https://doi.org/10.1007/978-3-658-20498-3_7

Schuck, A. R., & de Vreese, C. H. (2009). Reversed mobilization in referendum campaigns: How positive news framing can mobilize the skeptics. *The International Journal of Press/Politics*, *14*(1), 40–66. https://doi.org/10.1177/1940161208326926

Schwaiger, L., Vogler, D., & Eisenegger, M. (2022). Change in news access, change in expectations? How young social media users in Switzerland evaluate the functions and quality of news. *The International Journal of Press/Politics*, *27*(3), 609–628. https://doi.org/10.1177/19401612211072787

Serdült, U. (2014). Referendums in Switzerland. In M. Qvortrup (Ed.), *Referendums around the world* (pp. 65–121). Palgrave Macmillan. https://doi.org/10.1057/9781137314703_4

Shah, D. V., Cho, J., Eveland, W. P., & Kwak, N. (2005). Information and expression in a digital age: Modeling internet effects on civic participation. *Communication Research*, *32*(5), 531–565. https://doi.org/10.1177/0093650205279209

Strömbäck, J. (2008). Four phases of mediatization: An analysis of the mediatization of politics. *The International Journal of Press/Politics*, *13*(3), 228–246. https://doi.org/10.1177/1940161208319097

Strömbäck, J., Falasca, K., & Kruikemeier, S. (2018). The mix of media use matters: Investigating the effects of individual news repertoires on offline and online political participation. *Political Communication*, *35*(3), 413–432. https://doi.org/10.1080/10584609.2017.1385549

Strömbäck, J., & Nord, L. W. (2006). Do politicians lead the tango? A study of the relationship between Swedish journalists and their political sources in the context of election campaigns. *European Journal of Communication*, *21*(2), 147–164. https://doi.org/10.1177/0267323105064043

Tresch, A. (2009). Politicians in the media: Determinants of legislators' presence and prominence in Swiss newspapers. *The International Journal of Press/Politics*, *14*(1), 67–90. https://doi.org/10.1177/1940161208323266

Udris, L., & Eisenegger, M. (2021). Abstimmungsberichterstattung [News coverage of referendums]. In M. Prinzing & R. Blum (Eds.), *Handbuch politischer Journalismus* [Handbook political journalism] (pp. 219–227). Herbert von Halem.

Udris, L., Eisenegger, M., Vogler, D., Häuptli, A., & Schwaiger, L. (2020). Reporting when the current media system is at stake: Explaining news coverage about the initiative on the abolition of public service broadcasting in Switzerland. In E. C. Tandoc, J. Jenkins, R. J. Thomas, & O. Westlund (Eds.), *Critical incidents in journalism* (pp. 71–84). Routledge.

Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C., Matthes, J., Hopmann, D., Salgado, S., Hubé, N., Stępińska, A., Papathanassopoulos, S., Berganza, R., Legnante, G., Reinemann, C., Sheafer, T., & Stanyer, J. (2017). Political communication in a high-choice media environment: A challenge for democracy? *Annals of the International Communication Association*, *41*(1), 3–27. https://doi.org/10.1080/23808985.2017.1288551

Van Erkel, P. F., & Van Aelst, P. (2021). Why don't we learn from social media? Studying effects of and mechanisms behind social media news use on general surveillance political knowledge. *Political Communication*, *38*(4), 407–425. https://doi.org/10.1080/10584609.2020.1784328

Vogler, D. (2021). Sportberichterstattung in Schweizer Nachrichtenmedien: eine vergleichende Analyse aus einer normativen Qualitätsperspektive von 2011 bis 2019 [Sports reporting in Swiss news media: A comparative analysis from a normative quality perspec-

tive from 2011 to 2019]. *Journal für Sportkommunikation und Mediensport (JSKMS)*, *6*(1), 1–17.

Walter, S. (2019). Better off without you? How the British media portrayed EU citizens in Brexit news. *The International Journal of Press/Politics*, *24*(2), 210–232. https://doi.org/10.1177/1940161218821509

Wei, R., & Lo, V.-h. (2008). News media use and knowledge about the 2006 U.S. midterm elections: Why exposure matters in voter learning. *International Journal of Public Opinion Research*, *20*(3), 347–362. https://doi.org/10.1093/ijpor/edn032

Westlund, O. (2015). News consumption in an age of mobile media: Patterns, people, place, and participation. *Mobile Media & Communication*, *3*(2), 151–159. https://doi.org/10.1177/2050157914563369

Wettstein, M. (2012). Frame adoption in referendum campaigns: The effect of news coverage on the public salience of issue interpretations. *American Behavioral Scientist*, *56*(3), 318–333. https://doi.org/10.1177/0002764211426328

About the Authors

Daniel Vogler (PhD) is the research director of the Research Center for the Public Sphere and Society (fög) at the University of Zurich and research associate at the Department of Communication and Media Research at the University of Zurich (IKMZ). His research focuses on public relations, journalism, online communication, and computational social science.

Morley Weston is a research assistant at the Department of Communication and Media Research at the University of Zurich (IKMZ), and the Research Center for the Public Sphere and Society (fög) at the University of Zurich. His research focuses on computational methods, digital media repertoires, and spatial analysis of news media.

Quirin Ryffel is a research assistant at the Department of Communication and Media Research at the University of Zurich (IKMZ). His research focuses on media diversity, and the determinants and effects of perceived political viewpoint diversity exposure in modern information environments from a recipient's perspective.

Adrian Rauchfleisch (PhD, University of Zurich) is an associate professor at the Graduate Institute of Journalism, National Taiwan University. In his research, he focuses on the interplay of politics, the internet, and journalism in Asia, Europe, and the US.

Pascal Jürgens (PhD) is an associate professor for computational communication research at the University of Trier, Germany. His research addresses the influence of algorithmic recommendations, platforms, state coercion, and individual selectivity on societal cohesion. A pivotal part of it involves the development, verification, and application of computational methods.

Mark Eisenegger (PhD) is co-director and professor at the Department of Communication and Media Research, and chair of the Public Sphere and Society Division at the University of Zurich. He is also director of the Research Center for the Public Sphere and Society (fög) at the University of Zurich. His research focuses on the digital transformation of the public spheres, changes in media quality, and the effects of digitalization on organizational communication.

Lisa Schwaiger (PhD) is a postdoctoral researcher at the Department of Communication and Media Research (IKMZ), and at the Research Center for the Public Sphere and Society (fög) at the University of Zurich. Her research focuses on the digital transformation of the public spheres, online counter-publics, sociology of media and religion, and qualitative methods.

Urs Christen is head of IT and Data Administration at the Research Center for the Public Sphere and Society (fög) at the University of Zurich. His research focuses on computational social science.

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 19–30
https://doi.org/10.17645/mac.v11i1.6030

Article

Googling Referendum Campaigns: Analyzing Online Search Patterns Regarding Swiss Direct-Democratic Votes

Sina Blassnig *, Eliza Mitova, Nico Pfiffner, and Michael V. Reiss

Department of Communication and Media Research, University of Zurich, Switzerland

* Corresponding author (s.blassnig@ikmz.uzh.ch)

Submitted: 27 July 2022 | Accepted: 22 December 2022 | Published: 31 January 2023

Abstract
In direct democracies, voters are faced with considerable information demands. Although search engines are an important gateway to political information, it is still unclear what role they play in citizens' information behavior regarding referendum campaigns. Moreover, few studies have examined the search terms that citizens use when searching for political information and the potential "user-input biases" in this regard. Therefore, we investigate to what extent citizens search online for information about upcoming referendums and what differences emerge between proponents, opponents, and non-voters regarding the search terms they used and the results they visited, related to three national ballot proposals voted on in Switzerland on November 28, 2021. The study combines cross-sectional survey data with longitudinal digital trace data containing participants' Google Search histories obtained through data donations. Our findings show that participants rarely used Google to search for information about upcoming referendums. Moreover, most ballot-related searches employed rather neutral search terms. Nevertheless, a qualitative analysis of the search terms points to differences between different voting groups, particularly for the most prominent proposal around a Covid-19 law. The study provides interesting insight into how citizens search for information online during national referendum campaigns.

Keywords
data donation; direct democracy; Google; online search patterns; political information; referendum campaigns

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

In direct democracies, voters are faced with considerable information demands (Christin et al., 2002), especially in high-choice media environments (Van Aelst et al., 2017). On the one hand, citizens have more and more options to inform themselves about upcoming referendums. On the other hand, the use of opaque personalization algorithms by platforms such as Facebook or Google has sparked discussions about digital media's potential to foster selective exposure, create filter bubbles, and exacerbate political polarization (Nelson & Webster, 2017; Slechten et al., 2021). However, empirical studies have found little support for these assumptions (e.g., Fletcher & Nielsen, 2018; Möller, 2021; Nechushtai & Lewis, 2019). Instead, recent research indicates that citizens' intentional individual news consumption choices or "user-input biases" (Trielli & Diakopoulos, 2022) may be more important factors than algorithmic filtering regarding how diverse or biased citizens' information exposure is. Until now, few studies have considered these user-input biases, and, to the best of our knowledge, no study has investigated online search patterns in relation to direct-democratic referendums. In this vein, it is of great interest to analyze the use of search engines during referendum campaigns and examine potential differences in online information-seeking behavior across political camps and between voters and non-voters. Such differences in search behavior could relate to gaps in political knowledge (Hopmann et al., 2016) and more

broadly to partisan polarization and exposure to misinformation (Peterson & Iyengar, 2021). To this end, examining the search terms that people use can prove especially fruitful because search queries often serve as an entry point that shapes subsequent information-seeking patterns and browsing sequences (Trielli & Diakopoulos, 2022; Urman et al., 2021).

Against this background, the questions arise as to what extent and how citizens use search engines to inform themselves about upcoming national referendum campaigns, what kind of search terms they use, and whether differences emerge between proponents and opponents of specific ballot proposals, as well as nonvoters regarding the search terms used and results visited.

Based on a combination of cross-sectional survey data and participants' Google Search histories collected through data donations, this study investigates these questions concerning the national vote in Switzerland on November 28, 2021, which included three ballot proposals: (a) a referendum on the federal law on the legal basis for ordinances of the Federal Council for the management of the Covid-19 epidemic (*Covid-19-Gesetz*, henceforth referred to as "Covid-19 referendum"), (b) a popular initiative for strong care (*Pflegeinitiative*, henceforth referred to as "care initiative"), and (c) a popular initiative for the determination of federal judges by lot (*Justiz-Initiative*, henceforth referred to as "justice initiative"). The Swiss political system distinguishes between referendums and initiatives: A referendum, like the Covid-19 referendum, allows voters to uphold or repeal laws approved by the legislature. Using popular initiatives, such as the care or justice initiatives, the electorate can demand an amendment to the federal constitution (Appendix A of the Supplementary Material contains additional context information). Switzerland is a particularly interesting case because the referendum and popular initiative are centerpieces of its political system (Trechsel & Kriesi, 1996). Swiss citizens are asked to vote on various national issue-specific proposals four times per year and therefore face an especially high demand for political information. We focus on Google Search because it is the most popular search engine in Switzerland, used by 96% of Swiss internet users in every age group (Latzer et al., 2020).

Our findings show that participants in our sample rarely used Google to conduct ballot-related searches, and if they did, they often employed rather neutral search terms. Nevertheless, a qualitative analysis of the search terms points to differences between different voting groups for the most prominent proposal, the Covid-19 referendum. Moreover, through its innovative method, this study demonstrates the importance of combining self-reported survey data and behavioral digital trace data, as we find differences between search terms that participants suggested in the survey and those actually employed, according to participants' donated Google Search histories. Yet, one of the challenges of this approach is the recruitment of participants (Breuer et al., 2020). Due to a comparatively small sample of participants (n = 128) and data scarcity regarding ballot-related searches and visits, we refrain from formally testing the hypotheses proposed in the pre-registration. Instead, we explore the research questions exploratively and apply mainly descriptive and qualitative analyses.

2. The Role of Online Search Engines in Referendum Campaigns

To make rational political decisions, citizens need political knowledge. An informed electorate is therefore considered vital for a healthy democracy (Delli Carpini & Keeter, 1996), especially concerning referendums, in which citizens contribute to direct-democratic decisions on specific political issues. In deciding how to vote on specific ballot proposals, citizens draw on a variety of sources (Bonfadelli & Friemel, 2011). Although Swiss citizens attribute the highest relevance to offline contacts and traditional media regarding their political orientation (Reiss et al., 2021), they increasingly use online sources and search engines to obtain political information (fög, 2022).

In high-choice information environments, citizens combine different types of media use in their political information repertoires (e.g., Castro et al., 2022; Wolfsfeld et al., 2016) and increasingly access news in a "distributed" way through search engines, social media, and news aggregators (Fletcher et al., 2021; see also Bentley et al., 2019). Particularly, search engines have become one of the most important gateways to online news and political information (Bentley et al., 2019; Dutton et al., 2017; Möller et al., 2020; Newman et al., 2019) and can be considered a crucial factor in shaping political opinions (Epstein & Robertson, 2015). In a representative survey in Switzerland, 11% of respondents say their main gateway to online news is through search engines (fög, 2022). Moreover, Swiss citizens consider search engines more relevant than news aggregators or social media for forming political opinions (Reiss et al., 2021).

So far, the role of search engines, particularly Google, for political information purposes has mainly been investigated regarding election campaigns (e.g., Epstein & Robertson, 2015; Muddiman, 2013; Trevisan et al., 2018; Trielli & Diakopoulos, 2022; Unkel & Haim, 2021). In contrast to election campaigns in proportional systems—but similar to election campaigns in majoritarian electoral systems—referendum campaigns foster confrontation between two opposing camps. Referendum campaigns can further be distinguished from elections in that referendums focus on specific issues (Kriesi, 2011) and, therefore, can be viewed as a contest of topical arguments or issue frames (Hänggli, 2011). Whereas searches related to elections largely revolve around actors such as specific candidates (Trielli & Diakopoulos, 2022), the information-seeking behavior in referendum campaigns can be expected to be more issue-specific, with searches

reflecting different issue frames (van Hoof et al., 2022). However, referendum campaigns also bring a high level of insecurity and volatility because it is often unclear from the beginning which parties or elite actors stand on which side of the referendum (de Vreese, 2007). Thus, voters may combine issue-specific and actor-specific searches to consult their preferred party's position. Yet, few studies have examined the role of search engines for specific political issues, and most focus on the supply of information, for example, through content analyses of search results (e.g., Steiner et al., 2022). There is hardly any research on whether and how citizens search for information online during referendum campaigns. One notable exception is a qualitative study by Baxter and Marcella (2017) that explores how citizens searched for and used information during the Scottish referendum campaign on independence. However, because the study did not focus on search engines, it is still unclear to what extent and how citizens use them to get political information during referendum campaigns. This leads to our first two research questions:

> RQ1: How often do Swiss voters actively search for information regarding upcoming referendums on Google?

> RQ2: How often do Swiss voters click on search results regarding upcoming referendums on Google?

How often voters "google" for political information about referendums may be influenced by individual characteristics. Previous research has identified differences in the news consumption, political behavior, and political knowledge of Swiss citizens regarding age, gender, and education (e.g., Bonfadelli & Friemel, 2011; fög, 2022; Tawfik & Horber, 2010). Additionally, research on Swiss direct-democratic campaigns has shown that political interest motivates information-seeking and knowledge acquisition (Bonfadelli & Friemel, 2011). Similarly, the perceived importance of a political issue can drive more focused and elaborate information-seeking in direct-democratic votes (Goldberg et al., 2019). Furthermore, citizens' general information behavior may play a role, as Dutton et al. (2017) find that those who use search engines for political information are also likely to consult more media and sources. From this, we derive the following research question:

> RQ3: What differences emerge related to individual characteristics (gender, age, education, political interest, issue importance, information behavior) regarding how often Swiss voters actively search for information regarding upcoming referendums on Google?

Given that search engine results are based on algorithms, depend on the search terms used, and are potentially personalized, further questions arise as to how citizens search for political information on upcoming referendums and whether there are differences in the search behavior and the clicked-on search results between different voter groups.

3. The Relationship Between Search Behavior and Attitudes Towards a Ballot

Scholarly discussion on algorithmically induced filter bubbles and echo chambers in online information environments has been flourishing (Möller, 2021). Despite widespread fears that algorithmic personalization reinforces preexisting beliefs by presenting users with information that matches their interests, empirical findings mostly indicate that the prevalence of filter bubbles is rather low (for an overview, see, e.g., Möller, 2021; Ross Arguedas et al., 2022). Likewise, auditing studies focusing on news aggregators such as Google News detect high degrees of homogeneity and concentration in users' search results despite differences in users' browser histories and political orientation (Haim et al., 2018; Nechushtai & Lewis, 2019). Thus, fears surrounding algorithmic personalization and its ability to fragment information exposure might be overstated.

These deflating fears of algorithmic filter bubbles draw attention toward users' intentional news consumption choices or "user-input biases" (Trielli & Diakopoulos, 2022, p. 3), which might be among the driving factors determining whether information exposure is diverse or not (Dubois & Blank, 2018). This perspective is strongly related to classical paradigms like selective exposure and cognitive dissonance theory (Bryant & Davies, 2015). Trielli and Diakopoulos (2022) argue that search queries can be interpreted as expressions of searchers' political preferences; they empirically find some differences in the search terms employed by voter groups with different ideological leanings during US elections. Similarly, van Hoof et al. (2022) show that political attitudes can impact search queries about political issues. Applied to referendum campaigns, one could expect proponents and opponents of a ballot proposal to use different search terms that express their respective attitudes toward the proposal. Thus, we formulate the following research question:

> RQ4: What differences emerge between proponents, opponents, and non-voters regarding their employed search terms?

Differences in the use of search terms would not yet mean that proponents, opponents, and non-voters are exposed to different information sources. In fact, Trielli and Diakopoulos (2022, p. 157) find that Google results have a "mainstreaming effect": Despite differences in individual search terms, the search results include a highly similar set of media, practically neutralizing the differences in the search queries. However, the study does not analyze which results citizens click on. Based on selective exposure and cognitive dissonance theory

(Bryant & Davies, 2015), one could expect proponents and opponents of a ballot proposal to click on different search results depending on their political attitudes. Specifically, we could expect proponents to click more often on search results related to pro-proposition arguments than opponents and vice versa. This leads to the final research question:

> RQ5: What differences emerge between proponents, opponents, and non-voters regarding their visited search results?

4. Methods and Data

This study combines cross-sectional survey data with longitudinal digital trace data containing the Google Search histories of the survey participants. The digital trace data were collected through data donations from the survey participants, utilizing the right to data portability introduced by the General Data Protection Regulation (Ausloos & Veale, 2021). Compared to studies with similar research interests that relied on content analysis of keyword searches (Muddiman, 2013; Trielli & Diakopoulos, 2022; Unkel & Haim, 2021) or Google Trends data (Dutton et al., 2017; Trevisan et al., 2018), the combination of survey and digital trace data allows us to control for individual characteristics and to compare people's reported and actual search behavior. The study was preregistered (https://osf.io/xsp8z), although due to a lower response rate than expected, we focused on the research questions instead of the original hypotheses and had to adapt the analysis plan in large parts (deviations from the pre-registration are discussed in Appendix B of the Supplementary Material).

4.1. Research Design and Procedure

The survey consisted of three parts: First, participants provided information on their Google Search use and indicated whether they would be willing to donate their Google Search history for this research project. Participants who were unwilling to do so or did not have a Google account were dismissed from the study. Second, to donate their usage data, participants were redirected to an application set up by the researchers. In this application, participants were first instructed how to request and download their Google Search data from Google's takeout service (https://takeout.google.com/settings/takeout; for detailed instructions, see the questionnaire documentation in the pre-registration) and subsequently how to upload these data. During the upload, the data were automatically filtered to only contain entries recorded after 31 May 2021. After the upload, participants were shown an extract of the data they were about to donate. They then gave their final consent to donate their data to the research project. If they did not consent, the data were immediately deleted, and the participants were excluded from the remaining survey. Third, participants were again redirected to the survey to answer the remaining questions.

4.2. Operationalization

We used two approaches to measure ballot-related search terms: First, participants were asked in the survey to provide three to six search terms that they would use to search for information related to each proposal on Google (we call these survey search terms). Second, the search terms that they actually employed were extracted from the data donations (we call these donation search terms). Because the initial data donations contained all searches registered after 31 May 2021, the search terms had to be classified as being related to one of the three proposals or not. For this, a two-step approach was employed: First, a search term had to match both a list containing terms related to the issue of the respective ballot proposal *and* a list of terms related to the vote in general. These two lists were derived based on the survey search terms, the most-used terms on the websites of the pro and contra committees, and the official federal information. Second, the identified search terms were manually coded by the four researchers as either relevant or non-relevant for the respective ballot proposal (K_α = 0.94). If less than three out of the four investigators agreed, the search term was classified as non-relevant.

The ballot-related visits were extracted from the data donations and identified as follows: First, a visit was classified as potentially ballot-related if it was registered after a ballot-related search term and before the next search activity in the Google Search history. One search query could trigger more than one visit. Second, the identified visits were manually coded as either ballot-related or non-ballot-related by the researchers, following the same logic as the search terms.

Next, we identified the stance and categories of search terms and visits. To identify their stance, the survey search terms, donation search terms, and ballot-related visits were classified by the authors as either pro, contra, or neutral (K_α = 0.86). If less than three out of the four investigators agreed on a classification, the search term or visit was classified as neutral.

Additionally, we analyzed the search terms coded as neutral based on qualitative thematic coding (Braun & Clarke, 2012) following the example of Trielli and Diakopoulos (2022). First, initial codes were identified through open coding of the survey search terms for one voting proposal (care initiative). Second, through axial coding (Strauss & Corbin, 1998), discrete conceptual categories were derived and applied to the rest of the survey search terms. Finally, the categorization was refined and improved in discussion with all authors and applied to the donation search terms.

Voter groups were operationalized based on participants' self-report in the survey. For each voting proposal, participants indicated if they had voted "yes" or "no" or did not vote. Participants who voted "yes" were

classified as proponents, participants who voted "no" as opponents, and those who did not vote as non-voters for each proposal (for more context information, see Appendix A of the Supplementary Material).

Finally, participants' gender, age, education, political interest (1 = *not interested at all* to 7 = *highly interested*), political left–right orientation (1 = *left* to 7 = *right*), and perceived importance of the respective proposal (1 = *not important at all* to 5 = *very important*) were measured through self-reporting in the survey. Additionally, we asked about participants' information behavior, i.e., how often they came across information about the voting proposals on different types of channels (Google, YouTube, social media, newspapers/news sites, TV or radio, the official voting information booklet by the Swiss Federal Chancellery, and friends or family) on a scale from 1 (*never*) to 5 (*very often*). Based on these measures, we built a mean index indicating how often a participant, on average, came across information about the voting proposal on channels other than Google.

4.3. Participants and Sample

The study focused on German-speaking Swiss citizens who are eligible to vote (i.e., at least 18) and was conducted after the national vote on 28 November 2021. Ethical approval for the study was provided by the University of Zurich ethics committee (No. 21.10.1). Data collection took place from 29 November to 22 December 2021; 114 participants were recruited from the panel of a market research company, and 14 participants were recruited through an advertisement campaign on Facebook. Participation was rewarded with a fixed amount of Swiss francs for participants recruited by the market research company or by having a high chance of winning a voucher for participants recruited through Facebook.

The total sample consisted of 128 participants, 36.7% of whom were female (two participants did not indicate their gender), and the mean age was 47 (*SD* = 15.87, Min = 18, Max = 86). Regarding education, 5% reported compulsory school, 33% a vocational apprenticeship, 19% a high school diploma, and 42% a degree from a university or a university of applied sciences as their highest educational qualification attained. The mean political interest was 4.98 (*SD* = 1.59, Min = 1, Max = 7), and the mean political orientation was 3.7 (*SD* = 1.39, Min = 1 *left*, Max = 7 *right*). Due to the sampling procedure, this sample is not representative of the Swiss population. For comparison, Switzerland's permanent resident population (*N* = 8,670,300) has a mean age of 42.6 and is 50.4% female (Federal Statistical Office, 2022b). Regarding their highest educational qualification attained, 17% of the Swiss permanent resident population over 25 reported compulsory school, 33% a vocational apprenticeship, 9% a high school diploma, and 23% a university degree (Federal Statistical Office, 2022a). In a recent survey representative of the Swiss online population above 16, the average political interest was 3.33 (*SD* = 1.35) on a Likert scale from 1 to 5 (Reiss et al., 2021). Finally, according to representative data from the *Reuters Digital News Report*, the Swiss population positions itself practically in the center regarding political orientation (*M* = −0.02 on a scale from −0.5 = *fully left* to +0.5 = *fully right*; fög, 2022).

5. Findings

Overall, the final data contained 148,221 searches using 117,739 unique search terms and 103,386 visits to websites by 128 participants. Yet, regarding RQ1, the analysis shows that, across all proposals, respondents rarely searched for vote-related information on Google. In total, 90 ballot-related search queries were conducted across the three proposals. Of these, more than two-thirds (*n* = 65) were related to the Covid-19 referendum, 15 (16.7%) to the care initiative, and the remaining 10 (11.1%) concerned the justice initiative. In total, 78.9% of respondents (*n* = 101) never employed search terms related to the vote on November 28, while 21.1% of the respondents (*n* = 27) employed search terms related to the vote at least once. Of these 27 respondents, 21 searched for ballot-related information on Google between one and four times, and six used relevant search terms on five or more occasions. Search terms related to the Covid-19 referendum were employed most: 26 respondents searched at least once for the Covid-19 referendum, whereas only seven respondents did so for the care initiative and just five for the justice initiative. Notably, the number of searches is not evenly distributed across respondents, as five respondents account for half (51.1%) of all ballot-related searches that were conducted (see Tables A and B in Appendix C of the Supplementary Material).

Regarding RQ2, of the 90 relevant searches, 47 searches (52.2%) were followed by at least one visit. In total, 86 ballot-related visits were conducted after a related search query, with 14.8% of respondents (*n* = 19) proceeding to click on search results related to the votes. Of those, 14 clicked on related search results between one and four times. Five respondents clicked on search results more than five times. Compared to the results of RQ1, these percentages indicate that 70.3% (*n* = 19) of the 27 respondents who had previously conducted ballot-related search queries went on to visit a website, possibly to read more about the referendums; 75% (*n* = 48) of the relevant visits were conducted by three respondents. Notably, these three respondents also conducted the most searches within the sample.

Analogously to the findings for RQ1, respondents most often visited pages related to the Covid-19 referendum after conducting a related search query, followed by the care and justice initiatives. In total, 62.8% of visits (*n* = 54) pertained to the Covid-19 referendum, 25.6% (*n* = 22) to the care initiative, and the remaining 11.6% (*n* = 10) to the justice initiative. Of the 19 respondents who visited ballot-related websites, 16 visited a page

related to the Covid-19 referendum at least once, seven a page related to the care initiative, and five a page related to the justice initiative (see Tables A and C in Appendix C of the Supplementary Material).

Due to the low numbers of ballot-related search queries and subsequent visits related to the care initiative and the justice initiative, we focus on the Covid-19 referendum for the analysis of the remaining research questions.

To analyze RQ3, we perform logistic regression with a dummy variable indicating whether someone used at least one donation search term related to the Covid-19 referendum as a dependent variable; age, gender, education, political interest, perceived issue importance, and the mean index for information use were used as independent variables (see Table 1). Age has a significant negative effect, indicating that the younger the respondents, the more likely they were to conduct a ballot-related search. We find no significant effects for gender and education. General political interest has a significant positive effect. Thus, the more politically interested, the more likely someone was to google the referendum campaigns. In contrast, perceived issue importance has a significant negative effect, indicating that the higher the perceived importance of the Covid-19 referendum, the lower the likelihood that someone searched for it on Google. Finally, we find a significant positive effect for the use of other information channels, meaning that the more often participants came across information about the referendum on sources other than Google, the more likely they were to conduct ballot-related searches.

According to a descriptive analysis of participants' self-reported use of individual channels (see Table D in Appendix C of the Supplementary Material), participants relied to a relatively great extent on traditional media channels and on friends and family. Around half of the participants stated that they had used the official booklet (52.3%), online or offline newspapers (50.8%), and TV or radio (51.5%) often or very often to inform themselves about the referendums, whereas 27.3% said the same about Google, 23.4% about social media, and 9.4% about YouTube. More than two-thirds of participants (67.97%) discussed the referendum often or very often with friends and family. Descriptively (see Figure A in Appendix C of the Supplementary Material), it seems that those who searched for the referendum (n = 26) tended to rely on Google, YouTube, social media, and friends and family more often for information related to the referendum than those who did not conduct any ballot-related searches (n = 102). However, when we calculate the same regression as in Table 1 for all information sources separately (instead of including one summary variable for the mean use of other information channels), we do not find significant effects for any of the information sources individually (see Table E in Appendix C of the Supplementary Material). Thus, while people who generally informed themselves more about the referendum also conducted more ballot-related searches, the use frequency of other individual sources did not significantly affect the number of ballot-related searches.

To explore RQ4, we look at the kind of survey and donation search terms entered by the Covid-19 referendum's opponents (n = 28), proponents (n = 86), and non-voters (n = 14). In total, the participants entered 418 survey search terms related to the Covid-19 referendum, and 65 donation search terms were identified as ballot-related. Through the process of qualitative thematic coding described above, 15 categories of search terms were identified (Table D in Appendix C of the Supplementary Material contains descriptions and examples for all categories). Figure 1 shows the distribution of categories for the survey search terms and the donation search terms and compares the use of categories between proponents and opponents of the Covid-19 law as well as non-voters (Table G in Appendix C of the Supplementary Material provides counts and percentages for all categories and groups).

In the survey search terms, the most common category across voter groups is general ballot-specific (36.4%), which contains general queries about a specific ballot proposal using neutral language related to the proposal's official wording. Queries that were explicitly pro (2.6%) or contra (2.1%) were rare, and a similar share of the survey search terms included both pro and contra arguments (2.2%). Thus, the search terms entered in the survey are

Table 1. Logistic regression predicting the likelihood of conducting a ballot-related search for the Covid-19 referendum according to the data donations.

	Ballot-related searches (Covid-19 referendum)				
	Estimate	*SE*	*OR*	*CI* 2.5%	*CI* 97.5%
(Intercept)	−0.75	2.35	0.47	0.00	42.83
Gender	−0.66	0.58	0.52	0.16	0.98
Age	−0.07**	0.02	0.93	0.89	0.97
Education	−0.28	0.25	0.76	0.45	1.24
Political interest	0.59*	0.26	1.80	1.12	3.16
Issue importance	−0.62*	0.25	0.54	0.33	0.87
Use of other information channels (mean index)	1.29*	0.56	3.62	1.29	11.74

Notes: N = 123, AIC = 99.81, Nagelkerke R^2 = 0.38; SE = standard error, OR = odds ratio, CI = confidence interval; * $p < 0.05$, ** $p < 0.01$.

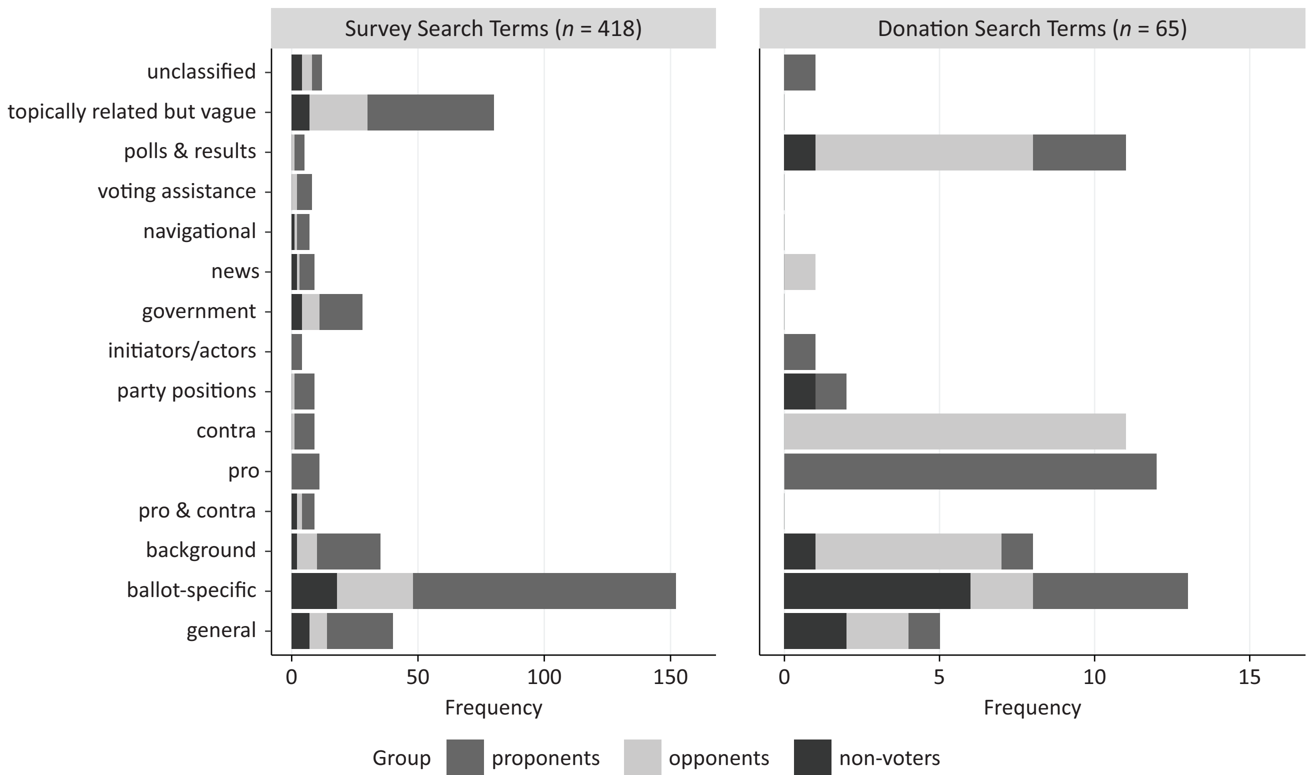

Figure 1. Distribution of categories of search terms per group for the Covid-19 referendum.

largely neutral. Yet, a variety of more specific categories also emerged, such as queries about background information on the referendum (8.4%), queries including references to the government (6.7%), queries about party positions (2.2%), or queries tailored to reach specific voting assistance websites (1.7%). However, there are no clear patterns that suggest differences between proponents, opponents, and non-voters.

Regarding the donation search terms, for proponents of the Covid-19 law, the three most common categories are pro (48%), general ballot-specific (20%), and polls and results (12%). Thus, almost half of the proponents' donation search terms are in the pro category, asking explicitly about the advantages of or arguments in favor of the law. For opponents, in contrast, the most common category is contra, with 37.9% of their donation search terms asking explicitly about the disadvantages of or arguments against the law, followed by polls and results (24.1%) and background (20.7%). The donation search terms entered by non-voters mainly fall into the categories general ballot-specific (54.5%) or general (18.2%), which both refer to more neutral and generalized search terms. Thus, Figure 1 reveals differences between the survey search terms and the donation search terms. The donation search terms fall into fewer categories than the survey search terms and reveal more interesting differences between the voter groups. Furthermore, in contrast to the survey search terms, none of the proponents' or opponents' donation search terms could be assigned to the opposing camp or included both pro and contra arguments.

Finally, to answer RQ5, we tabulate the counts of all ballot-related visits (n = 54) coded as pro, contra, or neutral for the Covid-19 referendum's proponents, opponents, and non-voters (see Table 2). Across all voter groups, most ballot-related visits for the Covid-19 referendum were classified as neutral. A qualitative analysis showed that these neutral visits contained a range of websites run mainly by the government—for example, the official government information page on the votes from November 28, 2021 (Federal Department of Home Affairs, 2021), or news media such as the Swiss public broadcaster (https://www.srf.ch) or *Neue Zürcher Zeitung* (https://www.nzz.ch). The few vote-related visits by non-voters were exclusively classified as neutral. In contrast, 37.5% of visits by proponents were identified as pro, and 30.3% of the visits by opponents were identified as contra. Thus, websites explicitly advocating in favor of the law were visited exclusively by participants who indicated in the survey that they had voted in favor of the law and vice versa. Based on qualitative inspection of the links, these visits coded as either pro or contra included visits to websites of the pro and contra committees (e.g., https://covidgesetz-nein.ch or https://ja-aus-vernunft.ch) as well as parties or organizations explicitly in favor of or against the proposal.

6. Discussion and Conclusion

Overall, our findings indicate that respondents rarely used Google to search for information about upcoming referendums. This low frequency of searches related to

Table 2. Distribution of pro, contra, and neutral visits related to the Covid-19 referendum per voter group.

	Visits related to the Covid-19 referendum					
	Proponents		Opponents		Non-voters	
	n	%	*n*	%	*n*	%
Pro	6	37.5	0	0.0	0	0.0
Contra	0	0.0	10	30.3	0	0.0
Neutral	10	62.5	23	69.7	5	100.0
Total	16	100.0	33	100.0	5	100.0

Notes: The descriptive statistics are based on n = 129 participants (86 proponents, 28 opponents, and 14 non-voters); n = 54 ballot-related visits.

the direct-democratic votes is remarkable, given the high complexity and relevance of such political decisions. One explanation could be that participants relied more on traditional news sources than online search engines for information about the upcoming vote. This interpretation is in line with previous findings on the perceived relevance of algorithmic selection applications for political information-seeking (Reiss et al., 2021) and supported by our survey data on participants' media use. Around half of the participants used traditional mass media or the official voting information booklet by the Swiss Federal Chancellery often or very often for vote-related information, whereas less than a third said the same about Google. Yet, the positive relation between average information use and ballot-related searches could indicate that search engines are a complementary form of information gathering rather than a substitute for more traditional information sources. However, due to the small non-representative sample, this interpretation is somewhat speculative.

We further find that the younger and more politically interested are more likely to search for ballot-related information. Whereas the effect for political interest is in line with previous research (Bonfadelli & Friemel, 2011), the finding regarding age may be because younger citizens generally use online sources more often for their political information (fög, 2022). Furthermore, we find that higher perceived issue importance of the referendum had a negative effect on whether someone performed a ballot-related search. This could be because these voters had already formed an opinion early on or relied on other information sources.

Although, according to the data donations, the respondents seldomly searched for vote-related information, for those that did, our qualitative analysis, on the one hand, points to noteworthy differences between the search terms that participants suggested in the survey and those that were actually employed in the data donations: The donation search terms were proportionally more often identified as explicitly pro or contra and were worded more generally than the survey search terms. On the other hand, both the survey and donation search terms were overall rather neutral and often closely related to the official description of the proposals, for example, in the form of general ballot-specific search terms. Additionally, most search terms were issue-specific and rarely included references to specific parties or other actors.

Furthermore, the qualitative analysis indicates differences between voting groups in their actual searching behavior. For the Covid-19 referendum, which was the most prominent and controversial of the three proposals in the Swiss news coverage (Udris, 2021), proponents more often used search terms related to proproposition arguments than opponents, and vice versa. In contrast, non-voters conducted fewer searches and employed more neutral search terms. Similarly, most ballot-related visits were neutral and often included government or news websites. Yet, websites explicitly in favor of the proposal were exclusively visited by proponents, and opponents of the proposal only visited websites explicitly against the proposal. Thus, the findings tentatively indicate potential user-input biases in searches and visits around referendum campaigns that should be further explored in future research.

Our study has several limitations. First, due to the relatively small sample and the data scarcity regarding ballot-related searches, our analyses remain largely descriptive and qualitative. Therefore, our findings should be interpreted with caution and cannot be generalized. Since we conducted our study, scholarly discussions about best practices of data donations and how to increase participation rates have intensified, and future studies should incorporate these novel insights into their design to obtain larger samples (Ohme & Araujo, 2022; van Driel et al., 2022). Second, the sample is not representative of the Swiss voting population and asking participants for data donations may introduce some self-selection bias. Compared to data from official population statistics and representative surveys, our respondents are disproportionately male, slightly older (partly due to our focus on voters above 18), more highly educated, and more politically interested. Given our finding that political interest positively correlates with ballot-related searches, we may, therefore, still overestimate how often Swiss citizens search for political information on Google. In contrast, this bias could be offset by the sample's slightly higher mean age, as age correlated negatively with ballot-related searches. Third, we cannot make any statements about the intentions behind the employed

search terms. For example, although the results suggest that the use of pro or contra search terms may reflect attitudes toward a ballot, it could be that people intentionally search for arguments or parties that oppose their attitude. Fourth, although googling during the campaign temporally precedes voting, we compared search patterns across groups defined by vote choice. Thus, there could be reverse causality in that the searches and websites visited influenced participants' vote choice and not vice versa. To better assess the causality between search behavior and vote choice, future research could rely on panel designs, asking about voting intentions and suggested search terms in a first wave in an early campaign stage, and obtaining participants' Google Search histories and final vote choice in a second wave after the vote. Finally, although the period of analysis included three voting proposals on very different issues, we examined only one voting date in one country, and our analysis focused mainly on the Covid-19 referendum. The fact that citizens most often searched for the Covid-19 referendum may indicate that the frequency of searches is higher for more contested issues. Accordingly, the frequency of searches may be higher in countries where referendums are rare and, therefore, often associated with higher stakes. In turn, this argument is contradicted by the finding that the perceived importance was negatively related to the likelihood that participants conducted ballot-related searches. Thus, as we can only speculate about such generalizations, future research should investigate whether the frequency of Google searches is higher for different issues or in other countries where referendums are less routine than in Switzerland.

Nevertheless, this study provides interesting insights into how Swiss citizens search for information online in national referendum campaigns. First, it indicates that search engines may only play a limited role in Swiss referendum campaigns. Second, it shows that when citizens search for ballot-related information, the search terms employed are largely neutral but may reflect certain user-input biases. Finally, through the comparatively novel approach of using survey respondents' data donations, the study points to the importance of combining self-reported survey data and behavioral digital trace data, as we find differences between the search terms suggested in the survey and the actually employed search terms according to participants' Google Search histories. Thus, this study shows that surveys are insufficient for investigating search behavior. Although searches about referendum campaigns are rare, they may be demonstrative of the searchers' intentions, reinforcing previous literature on search terms as indicators of personal attitudes.

Acknowledgments

We thank the editors of *Media and Communication* and the journal's anonymous reviewers for their constructive comments and suggestions. This work was supported by the Department of Communication and Media Research at the University of Zurich.

Conflict of Interests

The authors declare no conflict of interests.

Supplementary Material

Supplementary material for this article is available online: https://osf.io/9bhq3

References

Ausloos, J., & Veale, M. (2021). Researching with data rights. *Technology and Regulation*, *2020*, 136–157. https://doi.org/10.26116/techreg.2020.010

Baxter, G., & Marcella, R. (2017). Voters' online information behaviour and response to campaign content during the Scottish referendum on independence. *International Journal of Information Management*, *37*(6), 539–546. https://doi.org/10.1016/j.ijinfomgt.2017.05.013

Bentley, F., Quehl, K., Wirfs-Brock, J., & Bica, M. (2019). Understanding online news behaviors. In S. Brewster & G. Fitzpatrick (Eds.), *Proceedings of the 2019 CHI Conference on Human Factors in Computing Systems* (Paper No. 590). Association for Computing Machinery. https://doi.org/10.1145/3290605.3300820

Bonfadelli, H., & Friemel, T. N. (2011). Learning and knowledge in political campaigns. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns* (pp. 168–187). Palgrave Macmillan.

Braun, V., & Clarke, V. (2012). Thematic analysis. In H. Cooper, P. M. Camic, D. L. Long, A. T. Panter, D. Rindskopf, & K. J. Sher (Eds.), *APA handbook of research methods in psychology: Research designs—Quantitative, qualitative, neuropsychological, and biological* (Vol. 2, pp. 57–71). American Psychological Association.

Breuer, J., Bishop, L., & Kinder-Kurlanda, K. (2020). The practical and ethical challenges in acquiring and sharing digital trace data: Negotiating public-private partnerships. *New Media & Society*, *22*(11), 2058–2080. https://doi.org/10.1177/1461444820924622

Bryant, J., & Davies, J. (2015). Selective exposure. In W. Donsbach (Ed.), *The concise encyclopedia of communication* (pp. 564–566). Wiley.

Castro, L., Strömbäck, J., Esser, F., Van Aelst, P., de Vreese, C., Aalberg, T., Cardenal, A. S., Corbu, N., Hopmann, D. N., Koc-Michalska, K., Matthes, J., Schemer, C., Sheafer, T., Splendore, S., Stanyer, J., Stępińska, A., Štětka, V., & Theocharis, Y. (2022). Navigating high-choice European political information environments: A comparative analysis of news user profiles and political knowledge. *The International Journal of Press/Politics*, *27*(4), 827–859. https://doi.org/10.1177/1940161221101257

Christin, T., Hug, S., & Sciarini, P. (2002). Interests and information in referendum voting: An analysis of Swiss voters. *European Journal of Political Research*, *41*(6), 759–776. https://doi.org/10.1111/1475-6765.t01-1-00030

Delli Carpini, M. X., & Keeter, S. (1996). *What Americans know about politics and why it matters*. Yale University Press.

de Vreese, C. H. (2007). Context, elites, media and public opinion in referendums: When campaigns really matter. In C. H. de Vreese (Ed.), *The dynamics of referendum campaigns* (pp. 1–20). Palgrave Macmillan.

Dubois, E., & Blank, G. (2018). The echo chamber is overstated: The moderating effect of political interest and diverse media. *Information, Communication & Society*, *21*(5), 729–745. https://doi.org/10.1080/1369118X.2018.1428656

Dutton, W. H., Reisdorf, B. C., Dubois, E., & Blank, G. (2017). *Search and politics: The uses and impacts of search in Britain, France, Germany, Italy, Poland, Spain, and the United States*. SSRN. http://dx.doi.org/10.2139/ssrn.2960697

Epstein, R., & Robertson, R. E. (2015). The search engine manipulation effect (SEME) and its possible impact on the outcomes of elections. *Proceedings of the National Academy of Sciences*, *112*(33), 4512–4521. https://doi.org/10.1073/pnas.1419828112

Federal Department of Home Affairs. (2021). *Abstimmung vom 28. November 2021: Änderung Covid-19-Gesetz* [Vote of November 28, 2021: Amendment Covid-19 law]. https://www.edi.admin.ch/edi/de/home/dokumentation/abstimmungen/covid-19-gesetz.html

Federal Statistical Office. (2022a). *Highest completed education in Switzerland (time serie): Permanent resident population aged 25 years and above*. https://www.bfs.admin.ch/bfs/en/home/statistics/education-science/level-education.assetdetail.21144698.html

Federal Statistical Office. (2022b). *Switzerland's population in 2020*. https://www.bfs.admin.ch/bfs/en/home/statistics/population.assetdetail.19964433.html

Fletcher, R., Kalogeropoulos, A., & Nielsen, R. K. (2021). More diverse, more politically varied: How social media, search engines and aggregators shape news repertoires in the United Kingdom. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448211027393

Fletcher, R., & Nielsen, R. K. (2018). Automated serendipity: The effect of using search engines on news repertoire balance and diversity. *Digital Journalism*, *6*(8), 976–989. https://doi.org/10.1080/21670811.2018.1502045

fög. (2022). *Reuters Institute digital news report 2022: Länderbericht Schweiz* [Reuters Institute digital news report 2022: Country report Switzerland]. https://www.foeg.uzh.ch/dam/jcr:04d547fc-0fc3-42fc-bbf8-cee04a06ebcf/DNR_22_Schweiz.pdf

Goldberg, A. C., Lanz, S., & Sciarini, P. (2019). Mobilizing different types of voters: The influence of campaign intensity on turnout in direct democratic votes. *Electoral Studies*, *57*, 196–222. https://doi.org/10.1016/j.electstud.2018.11.008

Haim, M., Graefe, A., & Brosius, H.-B. (2018). Burst of the filter bubble? *Digital Journalism*, *6*(3), 330–343. https://doi.org/10.1080/21670811.2017.1338145

Hänggli, R. (2011). Key factors in frame building. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns* (pp. 125–142). Palgrave Macmillan.

Hopmann, D. N., Wonneberger, A., Shehata, A., & Höijer, J. (2016). Selective media exposure and increasing knowledge gaps in Swiss referendum campaigns. *International Journal of Public Opinion Research*, *28*(1), 73–95. https://doi.org/10.1093/ijpor/edv002

Kriesi, H. (2011). Political communication: An integrated approach. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns* (pp. 1–16). Palgrave Macmillan.

Latzer, M., Festic, N., & Kappeler, K. (2020). *Use and assigned relevance of algorithmic-selection applications in Switzerland*. University of Zurich. http://mediachange.ch/research/algosig

Möller, J. (2021). *Filter bubbles and digital echo chambers*. Routledge.

Möller, J., van de Velde, R. N., Merten, L., & Puschmann, C. (2020). Explaining online news engagement based on browsing behavior: Creatures of habit? *Social Science Computer Review*, *38*(5), 616–632. https://doi.org/10.1177/0894439319828012

Muddiman, A. (2013). Searching for the next U.S. president: Differences in search engine results for the 2008 U.S. presidential candidates. *Journal of Information Technology & Politics*, *10*(2), 138–157. https://doi.org/10.1080/19331681.2012.707440

Nechushtai, E., & Lewis, S. C. (2019). What kind of news gatekeepers do we want machines to be? Filter bubbles, fragmentation, and the normative dimensions of algorithmic recommendations. *Computers in Human Behavior*, *90*, 298–307. https://doi.org/10.1016/j.chb.2018.07.043

Nelson, J. L., & Webster, J. G. (2017). The myth of partisan selective exposure: A portrait of the online political news audience. *Social Media + Society*, *3*(3). https://doi.org/10.1177/2056305117729314

Newman, N., Fletcher, R., Kalogeropoulos, A., & Kleis Nielsen, R. (2019). *Reuters Institute digital news report 2019*. Reuters Institute for the Study of Journalism. https://www.digitalnewsreport.org/survey/2019

Ohme, J., & Araujo, T. (2022). Digital data donations: A quest for best practices. *Patterns*, *3*(4). https://doi.org/10.1016/j.patter.2022.100467

Peterson, E., & Iyengar, S. (2021). Partisan gaps in

political information and information-seeking behavior: Motivated reasoning or cheerleading? *American Journal of Political Science*, *65*(1), 133–147. https://doi.org/10.1111/ajps.12535

Reiss, M., Festic, N., Latzer, M., & Rüedy, T. (2021). The relevance internet users assign to algorithmic-selection applications in everyday life. *Studies in Communication Sciences*, *21*(1), 71–90. https://doi.org/10.24434/j.scoms.2021.01.005

Ross Arguedas, A., Robertson, C. T., Fletcher, R., & Nielsen, R. K. (2022). *Echo chambers, filter bubbles, and polarisation: A literature review*. Reuters Institute for the Study of Journalism. https://reutersinstitute.politics.ox.ac.uk/echo-chambers-filter-bubbles-and-polarisation-literature-review

Slechten, L., Courtois, C., Coenen, L., & Zaman, B. (2021). Adapting the selective exposure perspective to algorithmically governed platforms: The case of google search. *Communication Research*, *49*(8), 1039–1065. https://doi.org/10.1177/00936502211012154

Steiner, M., Magin, M., Stark, B., & Geiß, S. (2022). Seek and you shall find? A content analysis on the diversity of five search engines' results on political queries. *Information, Communication & Society*, *25*(2), 217–241. https://doi.org/10.1080/1369118X.2020.1776367

Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). SAGE.

Tawfik, A., & Horber, E. (2010). Les déterminants de la participation et quelques effets sur le vote de gauche [The determinants of participation and some effects on the left-wing vote]. In S. Nicolet & P. Sciarini (Eds.), *Le destin électoral de la gauche: Le vote socialiste et vert en Suisse* [The electoral destiny of the left: The socialist and green vote in Switzerland] (pp. 45–86). Georg Éditeur.

Trechsel, A. H., & Kriesi, H. (1996). Switzerland: The referendum and initiative as a centrepiece of the political system. In M. Gallagher & P. V. Uleri (Eds.), *The referendum experience in Europe* (pp. 185–208). Palgrave Macmillan.

Trevisan, F., Hoskins, A., Oates, S., & Mahlouly, D. (2018). The Google voter: Search engines and elections in the new media ecology. *Information, Communication & Society*, *21*(1), 111–128. https://doi.org/10.1080/1369118X.2016.1261171

Trielli, D., & Diakopoulos, N. (2022). Partisan search behavior and Google results in the 2018 U.S. midterm elections. *Information, Communication & Society*, *25*(1), 145–161. https://doi.org/10.1080/1369118X.2020.1764605

Udris, L. (2021). *Abstimmungsmonitor: Covid-19-Gesetz, Pflegeinitiative, Justizinitiative—Schlussbericht* [Voting monitor: Covid-19 law, care initiative, justice initiative—Final report]. fög. https://www.foeg.uzh.ch/dam/jcr:d9ba41f4-ca03-4b5f-988c-4378861878085a8/Abstimmungsmonitor_November_2021.pdf

Unkel, J., & Haim, M. (2021). Googling politics: Parties, sources, and issue ownerships on Google in the 2017 German federal election campaign. *Social Science Computer Review*, *39*(5), 844–861. https://doi.org/10.1177/0894439319881634

Urman, A., Makhortykh, M., & Ulloa, R. (2021). The matter of chance: Auditing web search results related to the 2020 U.S. presidential primary elections across six search engines. *Social Science Computer Review*, *40*(5), 1323–1339. https://doi.org/10.1177/08944393211006863

Van Aelst, P., Strömbäck, J., Aalberg, T., Esser, F., de Vreese, C. H., Matthes, J., Hopmann, D. N., Salgado, S., Hubé, N., Stępińska, A., Papathanassopoulos, S., Berganza, R., Legnante, G., Reinemann, C., Sheafer, T., & Stanyer, J. (2017). Political communication in a high-choice media environment. *Annals of the International Communication Association*, *41*(1), 3–27. https://doi.org/10.1080/23808985.2017.1288551

van Driel, I. I., Giachanou, A., Pouwels, J. L., Boeschoten, L., Beyens, I., & Valkenburg, P. M. (2022). Promises and pitfalls of social media data donations. *Communication Methods and Measures*, *16*(4), 266–282. https://doi.org/10.1080/19312458.2022.2109608

van Hoof, M., Meppelink, C. S., Moeller, J., & Trilling, D. (2022). Searching differently? How political attitudes impact search queries about political issues. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448221104405

Wolfsfeld, G., Yarchi, M., & Samuel-Azran, T. (2016). Political information repertoires and political participation. *New Media & Society*, *18*(9), 2096–2115. https://doi.org/10.1177/1461444815580413

About the Authors

Sina Blassnig is a senior research and teaching associate at the Department of Communication and Media Research (IKMZ) at the University of Zurich. Her main research areas include online political communication, digital journalism, and the changing role of citizens in digital information environments. She wrote her dissertation on populist online communication and is working on projects on algorithmic news recommender systems, online information behavior, and hate speech.

Eliza Mitova is a research assistant, lecturer, and doctoral student at the Department of Communication and Media Research (IKMZ) at the University of Zurich. Her research focuses on the use, perception, and impact of algorithmic solutions on journalism, political information environments, and democratic society.

Nico Pfiffner is a research assistant and PhD candidate at the Department of Communication and Media Research (IKMZ) at the University of Zurich. His current work focuses on the question of how digital trace data can be made accessible for academic research through data donations from citizens. He is interested in both the technical implementation of data donation collections as well as the associated practical and epistemological challenges and implications.

Michael V. Reiss is a research assistant and PhD candidate at the Department of Communication and Media Research (IKMZ) at the University of Zurich. In his research, he applies and combines traditional quantitative and computational methods to advance our understanding of news consumption, news avoidance, and political orientation in the online sphere.

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 31–42
https://doi.org/10.17645/mac.v11i1.6051

Article

Do Intensive Public Debates on Direct-Democratic Ballots Narrow the Gender Gap in Social Media Use?

Laurent Bernhard [1,2,*] and Daniel Kübler [1]

[1] Centre for Democracy Studies Aarau (ZDA), University of Zurich, Switzerland
[2] Institute of Political Studies, University of Lausanne, Switzerland

* Corresponding author (laurent.bernhard@unil.ch)

Submitted: 30 July 2022 | Accepted: 15 December 2022 | Published: 31 January 2023

Abstract
Despite the growing importance of new technologies, research on individual opinion formation in the digital domain is still in its infancy. This article empirically examines citizens' use of social media in the context of direct democracy. Based on previous work, we expect men to form their opinions on social media more frequently than women (gender gap hypothesis). In the second step, we focus on the contextual level by examining the role campaigns play in reducing this discrepancy. More specifically, we hypothesize that the presumed gender gap narrows in accordance with the increasing intensity of public debates that precede ballots (interaction hypothesis). The empirical analysis draws on 13 post-ballot surveys held at Switzerland's federal level from 2016 to 2020 and supports both the gender gap and the interaction hypotheses.

Keywords
campaign; digitization; direct democracy; gender gap; media coverage; political communication; public debate; social media; Switzerland

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

In the wake of the digital transformation, political communication has increasingly moved online. For citizens, the advance of digital technologies has dramatically expanded the range of tools through which they can get involved politically. In recent years, social media channels have established themselves as popular venues of participation. Political debates currently take place on Facebook, Twitter, and many other platforms. These new digital media have not only become important sources of information; they have also enabled citizens to counter the top-down communication of traditional print and broadcast media thanks to their flexible, open, and interactive nature, thus fostering opportunities for bottom-up communication (Esser, 2013).

However, these new platforms also raise concerns about social inequalities (Halford & Savage, 2010). It is important to consider these new venues for social inequalities given that the role of digital media is likely to continue to grow in the future. According to Robinson et al. (2015, p. 571), "one cannot understand the social landscape of the twenty-first century without coming to grips with digital inequalities." Groups that tend to be excluded from the digital domain are likely to experience decisive disadvantages in terms of political representation. If these groups are unable to compensate for their lack of online presence through their engagement in the declining offline world, it is likely that their voices will be heard less in the political debate, thus leading to reduced visibility, voice, and influence in decision-making (Grasso & Smith, 2022, p. 43). This exclusion is especially worrisome when the views of these groups differ from those of the more digitally involved ones.

This article examines the gender gap, one of the most persistent social inequalities in politics, by focusing on

the individual use of social media in political campaigns. We test two hypotheses based on theoretical considerations developed in the next section. First, we expect that men form their opinions through social media more frequently than women (gender gap hypothesis). Second, we focus on the contextual level by examining how the intensity of public debates reduces this individual-level discrepancy (interaction hypothesis). More specifically, we hypothesize that the presumed gender gap narrows with increasing media coverage.

We test these hypotheses in the context of direct-democratic votes. Although reliance on digital media has become more popular, the overwhelming majority of existing studies on citizens' use of social media in campaigns focus on elections (Owen, 2017). Research on direct democracy is thus still in its infancy. If empirical studies exist, they typically focus on single votes (e.g., Arlt et al., 2019; Del Vicario et al., 2017). Systematic studies on the use of social media in the context of referendums and initiatives can thus be considered a major lacuna in the current scholarly literature.

This article focuses on Switzerland, thereby taking full advantage of the fact that it hosts many direct-democratic ballots. The empirical analysis draws on the so-called "VOTO studies." These are post-ballot surveys of a representative sample of Swiss citizens conducted after each of the 13 ballots that occurred at the Swiss federal level from September 2016 to September 2020. Our empirical analyses reveal support for both the gender gap and the interaction hypotheses.

The remainder of this article is structured as follows. In Section 2, we develop our theoretical arguments, which culminate in the formulation of the gender gap and the interaction hypotheses. Section 3 briefly describes the selected Swiss direct-democratic context and provides an overview of the data and the measurement of the indicators. Section 4 presents the results of our bivariate and multivariate analyses. In Section 5, we recapitulate and discuss the main findings of this article and provide interested scholars with some avenues for future research.

2. Gender Gaps in Social Media Use

The late suffrage granted to women compared with men in many Western democracies has historically led to lower levels of female participation in elections. While women now generally participate more in elections, their turnout levels have still not reached those of men in some countries (Franceschet et al., 2019). In addition, women lag when it comes to numerous types of traditional political participation in the offline domain. While they tend to participate more in private and individual ways (see Gundelach & Kalte, 2021), collective and conventional forms of public engagement are more prevalent among men (Coffé & Bolzendahl, 2010).

From a theoretical point of view, there are two main explanatory factors for the persistent gender gaps in political engagement: individual resources and socialization (Verba et al., 1997). As far as individual resources are concerned, women have been historically disadvantaged in terms of income, education, time, and civic skills, thus leading to their lower levels of political participation (Grasso & Smith, 2022, p. 43). The most important factor is probably that women are still more likely to take care of their children, which allows them less time to get involved in politics and blocks their opportunities to acquire the skills to do so. As a result, politics tend to remain dominated by men.

In terms of socialization, there has always been a focus on the binary division between men's and women's roles in democratic societies. The different manners of raising young girls and boys crucially affect their political engagement. More specifically, women's spheres have been more private, given that they revolve around family well-being, while men's spheres have been public and perceived as more essential (Coffé, 2013, p. 325). Therefore, there is a culture of masculinity in the realm of politics that can act as a deterrent for women (Bäck et al., 2014, p. 507). It is therefore consistent that girls currently still express less interest and enthusiasm than boys for political life and political office (Bos et al., 2020).

In connection with today's digitization of political communication, scholars have addressed the salient question of whether existing gender gaps disappear or persist with the rise of social media, which grants citizens a new means through which to form their political opinions. There is no doubt that these platforms have become very popular in recent years. In line with the equalization thesis, according to which structurally disadvantaged groups can compensate for their political weaknesses thanks to new digital media, optimists have highlighted the potential of social media for women (e.g., Xenos et al., 2014). Due to low access barriers, social media may offer the opportunity for a larger public to get involved in political discussions. Given that social media allow for deinstitutionalized and interactive communication and permits every single user to produce content (Bechmann & Lomborg, 2013), there was hope that low-status and peripheral actors would also be able to benefit from them and not only traditionally more powerful and established ones.

The scholarly literature suggests that three main factors may encourage the equalization of political online engagement with respect to gender (e.g., for an overview of the literature see Abendschön & García-Albacete, 2021). First, social media allow women to compensate for time-consuming offline activities. Second, women were found to use more frequently social media than men in the United States (Hargittai & Jennrich, 2016), which can be seen as an encouraging sign for closing the gender gap in the political online sphere. Third, major socio-structural trends in Western societies, such as higher levels of female education and labour market participation, can be expected to lead many women to easily acquire the resources required to be involved

online. This argument thus quasi automatically envisions an increased share of women who participate in political communication.

However, after some initial optimism, numerous empirical studies on individual political online activities (e.g., Bode, 2017; Boulianne et al., 2021; Theocharis & Van Deth, 2018) have revealed significant gender gaps. In line with classic studies on political engagement in the offline world, women were also rather consistently shown to be less active than men in the digital world. This pattern lends support to the normalization thesis. According to this thesis, existing power imbalances get reproduced in the digital realm (Margolis & Resnick, 2000).

Altogether, women are much more likely to resort to social media for private purposes than men (Hargittai & Jennrich, 2016). In particular, the gender gap in social media use proves to be particularly large in online engagement that has high visibility such as posting, sharing, and debating political content (Bode, 2017; Joiner et al., 2014). Hence, women may be less likely than men to form their political opinions on social media.

To explain persisting gender gaps, various scholars have stressed that women face a particularly hostile climate on social media. Indeed, harassment of women is a recurrent topic in this strand of literature (Boulianne et al., 2021; Schiffrin et al., 2021). Amongst others, studies show that fear of harassment shapes women's likelihood to express their political views online, particularly on social media, and more so than men's (Koc-Michalska et al., 2021; Nadim & Fladmoe, 2021).

Moreover, campaign contexts may further deter women from using social media for opinion-formation purposes. Unlike ordinary politics, campaigns are characterized by highly visible public conflicts between political camps, which are typically unwilling to make any concessions or compromises. In addition, personal attacks, scandals, and other incivilities are much more likely to occur during campaigns (Kahn & Kenney, 1999). Given that women have been found to be more conflict-avoidant, more sensitive to other people's opinions, and prefer a positive tone in online communication (Lin & Lu, 2011; Ulbig & Funk, 1999), we expect gender gaps to be visible in terms of opinion formation in campaign contexts. We also believe this may apply to direct-democratic ballots, which is the focus of this article.

Hence, the gender gap hypothesis goes as follows:

> H1: Men form their opinions on social media more frequently than women.

In addition to H1, we are interested in the moderating role played by contextual characteristics in reducing gendered discrepancies at the individual level. More specifically, we hypothesize that the presumed gender gap narrows with the increasing intensities of public debates that precede electoral decisions. This expectation is rooted in the following theoretical consideration: High levels of public debate intensity preceding democratic votes increase the interest of politically less involved citizens, thereby leading to a "democratic expansion," i.e., to a more inclusive use of social media for opinion formation purposes. We expect that this democratic expansion results in a narrowing of the gender gap.

In the following, we outline our line of reasoning by focusing on direct democracy. The public debates that precede referendums and initiatives provide citizens with a prime source of political information from various political actors, journalists, and their peers (Kriesi, 2011). It should be noted that we prefer the notion of public debate to that of campaigns since the latter is basically limited to mobilization and communication efforts by partisan actors who aim to convince citizens of their respective issue-specific positions (Bernhard, 2012). In contrast, media actors are usually much more neutral and also typically let both sides have their say in the reporting (Udris et al., 2016).

Overall, the cognitive and emotional involvement of individuals may increase as the public debate on a given direct-democratic ballot intensifies (Kriesi, 2005). This public debate provides citizens with a unique occasion to learn about the issues that are submitted to the ballot, to receive issue-relevant political information, and to increase their issue-specific awareness. As a result, citizens may search for additional information to form their opinions and share content on interactive social media platforms.

Two key mechanisms may be at play here: motivation and capacity. As to motivation, intensive public debates signal to citizens that important political topics are at stake. Extensive media coverage draws citizens' attention to these issues since citizens receive a high number of messages. As a result, they are willing to learn more and become better informed. In especially intensive cases, citizens can hardly escape the public debate. Many start to understand how the issue affects them at both the individual and societal levels. As a consequence, they become motivated to get involved in order to defend their personal or collective political interest (Kriesi, 2005).

Regarding capacity, direct democracy imposes high demands on citizens in terms of issue-specific knowledge. Indeed, ordinary citizens cannot generally be expected to have such information when referendums and initiatives are placed on the ballot. However, intensive public debates create an environment that may be conducive to political learning by noticeably increasing the flow of information to citizens (Kriesi, 2011). When exposed to huge amounts of media reports about the contents of the ballot propositions at stake, citizens are able to acquire substantial issue-specific knowledge (Bernhard, 2018). In this context, it has been shown that, in the case of Switzerland, intensive media coverage leads to a "steady stream of arguments and voting cues, allowing voters to make enlightened choices that are in line with their preferences" (Kriesi, 2011, p. 238).

Assuming that intensive public debates on direct-democratic ballots increase an extraordinary number of citizens' motivations and capacities to get politically involved, social media should lead to a more inclusive composition of citizens who are able to form an opinion on the issues at stake. In other words, in this environment, access to social media is expected to be less restricted to politically advantaged groups. This logic may apply to all kinds of structural inequalities, including those related to gender, which are at the core of this article.

Based on these considerations, we are now equipped to formulate the second hypothesis, the interaction hypothesis:

> H2: The gender gap in social media use for opinion formation purposes narrows with the increasing intensity of public debates.

3. Case Selection, Data, and Measurements

This article focuses on Switzerland, the paradigmatic case of direct democracy. Despite the worldwide rise in the use of ballot measures in the last few decades (Qvortrup, 2018), the country still stands alone in its extensive use of referendums and initiatives. Up to four times a year, citizens are called to the ballot boxes to decide on issue-specific propositions that can occur at the country's three political levels (i.e., federal, cantonal, and local). Hence, scholars interested in the practice of direct democracy are well advised to take full advantage of Switzerland's experience.

As with experiences in other liberal democracies (e.g., de Vreese, 2007), the issue-specific public debates that precede direct-democratic votes are crucial for citizens' opinion formation in the Swiss case. In addition to interpersonal communication, citizens have been found to rather routinely make up their minds based on elite communication from political actors and journalists (Kriesi, 2011). While traditional mass media (especially newspapers, TV, and radio broadcasts) still play a central role, social media have steadily grown in importance over recent years (e.g., Arlt et al., 2019; Udris et al., 2016).

The empirical analysis relies on the so-called "VOTO studies." These are post-ballot surveys that rely on computer-assisted telephone interviews (CATI). They contain around 1,500 respondents for each study with an overrepresentation of respondents from the French and Italian-language regions, compared with the majority from the German-speaking part of the country. On behalf of the Swiss Federal Chancellery, the "VOTO studies" were conducted by the Swiss Centre of Expertise in the Social Sciences together with the Centre for Democracy Studies Aarau at the University of Zurich and the private pollster LINK after each of the 13 ballots that took place at the federal level between September 2016 and September 2020 (more details can be found at https://www.voto.swiss).

Note that we decided to limit ourselves to this dataset because previous systematic post-ballot surveys did not include the participants' social media use. In the last years of the so-called "VOX analyses" (1977–2016), the surveys only contained a crude question on the role played by the internet. The new "VOX analyses" (since November 2020), for their part, are based on a different methodological approach. They rely on mixed-mode surveys using online and paper questionnaires, which is why it is not obvious to link their data with the CATI-based "VOTO studies."

Table 1 lists the 13 selected ballots in chronological order. As can be seen from this table, the number of propositions that were submitted to the vote ranges from one to five.

We now turn to the construction of the indicators that are used in this analysis. The dependent variable is the social media use for opinion formation purposes. It is dichotomous in nature: Respondents were asked whether they relied on "social media such as Facebook and Twitter" to inform themselves and form an opinion prior to voting (code 1 for *yes*, 0 for *no*). This item is part of a battery that contained 12 other information sources (see below). It is also worth mentioning that only citizens who participated in a given ballot were asked this question. Hence, abstainers were automatically excluded from our analysis. This means that the voter composition differs across ballots. There are competing theoretical expectations as to whether this selection affects the result of our empirical analysis. We will address this question in the conclusion.

A first look at this indicator reveals that on average a little more than one in four respondents reported having used social media for their opinion formation (26.6%). It appears that there is some substantial variation across ballots. Indeed, the minimum score amounts to 23.7% for VOTO 10 and the maximum one to 33% for VOTO 13.

Regarding gender, the main independent variable, we distinguish between women (code 1) and men (code 2). While scholars usually resort to this biological operationalization, a non-binary measure would be preferable in order to be in line with gender theory (Bittner & Goodyear-Grant, 2017). Unfortunately, such an indicator is not available from the VOTO surveys.

For the intensity of the public debates, which we will interact with gender for testing H2, we incorporated external data on media coverage into the VOTO dataset. Thanks to the courtesy of the Research Center for the Public Sphere and Society at the University of Zurich (fög), we employ an indicator that includes the number of articles produced by 19 important Swiss media outlets from the two biggest language regions i.e., the German- and French-speaking parts (for similar measures, see e.g., Udris et al., 2016). We added the number of articles these media outlets produced about the proposition(s) submitted to a given ballot during the hot phase of the campaigns (i.e., in the period between 12 weeks and one week before the ballot date).

Table 1. Overview of the selected ballots (in chronological order with the submitted propositions).

Ballot	Date	Proposition	Type
VOTO 1	September 25, 2016	Green economy Old age scheme insurance (OASI) Intelligence law	Popular initiative Popular initiative Optional referendum
VOTO 2	November 27, 2016	Withdrawal from nuclear energy	Optional referendum
VOTO 3	February 12, 2017	Facilitated naturalizations Roads and agglomeration transport fund Corporate tax reform III	Compulsory referendum Compulsory referendum Optional referendum
VOTO 4	May 21, 2017	Energy law	Optional referendum
VOTO 5	September 24, 2017	Food security Additional financing of OASI OASI reform 2020	Direct counter draft to popular initiative Compulsory referendum Optional referendum
VOTO 6	March 4, 2018	New financial regime Abolition of radio and TV fees	Compulsory referendum Popular initiative
VOTO 7	June 10, 2018	Sovereign money Gambling law	Popular initiative Optional referendum
VOTO 8	September 23, 2018	Bicycle lanes Fair food Food sovereignty	Direct counter draft to popular initiative Popular initiative Popular initiative
VOTO 9	November 25, 2018	Subsidies for cow horns Self-determination Monitoring of insured people	Popular initiative Popular initiative Optional referendum
VOTO 10	February 10, 2019	Urban sprawl	Popular initiative
VOTO 11	May 19, 2019	Corporate tax reform and financing of OASI Weapons law	Optional referendum Optional referendum
VOTO 12	February 9, 2020	Affordable housing Ban of discrimination on sexual orientation	Popular initiative Optional referendum
VOTO 13	September 27, 2020	Limitation of immigration Hunting law Child tax deductions Paternity leave Purchase of fighter jets	Popular initiative Optional referendum Optional referendum Optional referendum Optional referendum

Among the selected ballots, VOTO 13 turns out to have attracted the highest amount of media coverage (1,376 articles). This is not surprising, given that it was the only one to include the maximum of five propositions. In contrast, the minimum value is reached for VOTO 10 (260 articles). On this ballot, Swiss citizens were only invited to decide on one proposition, a rather low-salient popular initiative aiming to contain urban sprawl. However, it is worth noting that a change occurred in the media sample from VOTO 8 on. For 13 media outlets, the articles from the print editions were replaced with online articles. According to the members of fög, this may have caused a slight increase in the number of articles after VOTO 7. We will return to this issue in the empirical analysis.

We also control for a series of variables that can be expected to influence the extent of individual social media use. Perhaps most importantly, we account for the respondents' age (in years). This is due to the fact that previous studies have consistently shown that social media are by far the most popular among younger people (e.g., Hernandez, 2019; Owen & Deng, 2021). In addition, socio-economic status is likely to be positively associated with the dependent variable. We include the respondents' level of education by relying on a six-level hierarchical classification elaborated by the Federal Statistical Office.

Additionally, we consider three types of political variables. First, we look at the respondents' degree of political interest. To that end, we rely on an increasing four-level scale (*not at all interested*, *not very interested*, *somewhat interested*, *very interested*) with the expectation that there is a positive association with social media use for opinion formation purposes. Second,

political ideology is measured by the respondents' self-positioning on a left-right scale that ranges from 0 (*completely left*) to 10 (*completely right*). Research indicates that communities from the left are particularly active on social media in Switzerland (Arlt et al., 2019). Third, we also include party identification by drawing a distinction between eight partisan groups: sympathizers with the six largest parties of the country (i.e., Swiss People's Party, Social Democrats, Liberals, Christian Democrats, Greens, and Green Liberals), sympathizers with another party as well as independents.

We also control for the effects of language region affiliation. Based on the respondents' commune of residence, we draw a distinction between German-, French-, and Italian-speaking parts. Given that the Swiss public sphere is segmented along its three main languages, the use of social media may vary across language regions. Public debates on federal direct-democratic may be generally less intense in smaller language regions, thus possibly leading to a lower social media reliance for opinion formation purposes in the French—and especially in the Italian-speaking parts—as compared to the German language region.

Finally, we consider the influence of two communication-related factors. First, we expect that citizens who discuss a given ballot with others in their private environment may be more likely to rely on social media. The intensity of private discussions is measured on a five-level scale (code 1 for *never*, 2 for *less often than weekly*, 3 for *about once a week*, 4 for *several times a week*, and 5 for *on a daily basis*). Second, we are interested in the relationship between social media and more traditional information sources. Does the use of social media substitute traditional media sources or are these media types complementary to each other? Based on the scholarly literature (e.g., Dimitrova et al., 2014), we anticipate that they are complementary. Hence, respondents who indicate that they use more traditional sources may also be more likely to form their opinions on social media platforms. For more traditional information sources, we rely on an additive composite index that includes the remaining twelve items of battery asked in the framework of the "VOTO studies" (i.e., newspaper articles, radio broadcasts, TV broadcasts, official ballot pamphlets, leaflets, newspaper ads, billboards, online news, letters to the editor, polls, messages at the workplace, and videos). This measure thus ranges from 0 to 12.

4. Empirical Analysis

The empirical analysis occurs in two steps. First, we present descriptive bivariate analyses in which we outline social media use according to individual and contextual characteristics. Second, we turn to the multivariate analysis by testing the two hypotheses we formulated in the previous section.

In line with H1, women used social media much less frequently than their male counterparts to form an opinion before voting. On average, only 22.8% of female participants reported having relied on platforms such as Facebook and Twitter. In contrast, this share reaches 30.2% among male respondents. When dividing the latter figure by the former, one obtains a gender gap value of 1.33. This indicates that men's reliance on social media exceeds that of women by 33%. A bivariate Z-test shows that the detected gender gap is statistically significant (z-value = 9.96; $p < 0.001$).

As is visible from Table 2, men display higher shares of social media use for each of the 13 selected direct-democratic ballots. However, the degree of the gender gap varies considerably in each case. Whereas men were more than 70% as likely to rely on social media in the context of VOTO 10, the gap is slightly less than 9% in the case of VOTO 6. On the basis of bivariate Z-tests, it turns out that the gendered differences are statistically secured at the 5%-error level in eleven ballots. The exceptions include the two ballots with the lowest gender gaps in magnitude, i.e., VOTO 6 and VOTO 13.

We also analyzed the role played by media coverage. Figure 1 depicts the correlation between the number of

Table 2. The magnitude of the gender gaps in social media use by ballot.

Ballot	Men	Women	Gender gap	$P > Z$
VOTO 1	26.5%	20.3%	1.31	0.009
VOTO 2	32.4%	22.8%	1.42	0.000
VOTO 3	30.6%	25.0%	1.23	0.027
VOTO 4	29.4%	23.7%	1.24	0.027
VOTO 5	32.8%	20.5%	1.60	0.000
VOTO 6	32.3%	29.7%	1.09	0.171
VOTO 7	31.9%	20.3%	1.58	0.000
VOTO 8	28.0%	19.2%	1.46	0.000
VOTO 9	29.3%	20.7%	1.41	0.001
VOTO 10	27.2%	15.9%	1.71	0.001
VOTO 11	26.5%	19.0%	1.40	0.010
VOTO 12	29.7%	23.1%	1.29	0.031
VOTO 13	34.8%	31.2%	1.12	0.071

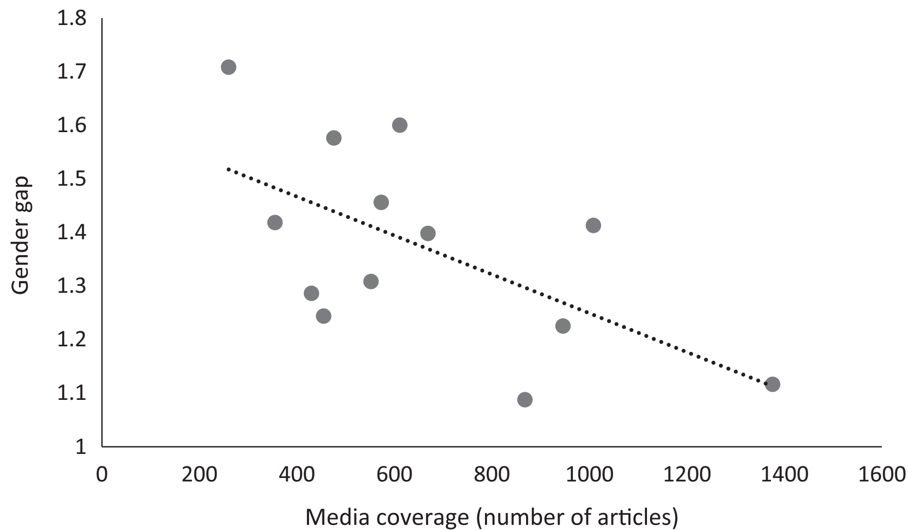

Figure 1. Correlation between the amount of media coverage and the degree of the gender gap in social media use by ballot.

articles and the degree of the gender gap in social media use for the 13 ballots under scrutiny. As can be seen from the trend line, there is a clear negative relationship and the slope amounts to –0.61. This basic pattern is thus in line with H2.

In the following, we test our hypotheses in a multivariate setting. To that end, we relied on multilevel modelling. Model 1 in Table 3 presents the results of six two-level random-intercept regression estimations that explain the reliance on social media by individual and contextual factors. For the time being, we focus on Model 1, the standard model. In accordance with the findings of the bivariate analysis, men are generally found to rely on social media more frequently for opinion formation purposes than women. Indeed, the coefficient for "man" proves to be positively significant at the 0.1% error level. This result thus strongly supports the gender gap hypothesis (H1).

The third coefficient of Model 1 (i.e., man × media coverage) indicates that the gender gap narrows with increasing media coverage. The statistical association is secured at the 5% error level. This significant negative interaction term is in line with H2, thus confirming the impression gained from Figure 1. Hence, high levels of public debates preceding direct-democratic ballots decisively contribute to reducing gendered discrepancies in social media use for opinion formation purposes. To illustrate this significant interaction, Figure 2 depicts the predicted marginal effects of the amount of media coverage on social media use for both women and men. The positive slope is much steeper for women, thus indicating that the intensity of public debates is instrumental for women to compensate for their lower reliance on social media.

As for the control variables, three factors prove to be statistically significant. First, the amount of media coverage is instrumental in increased social media use. This indicates that there is a strong direct effect on individual social media reliance emanating from the intensity of public debate. Second, age is negatively related to the dependent variable—confirming that social media are mostly used by younger people. Third, respondents who rely on a high number of more traditional information sources are also more likely to form their opinions on social media platforms. This positive association points to a complementary relationship between older and newer forms of information sources, a pattern that has established itself in the academic literature. There are no significant effects to report for the remaining control variables.

To test the robustness of these results, we decided to rely on a series of alternative specifications. In Model 2, we applied a design weight that adjusts for the overrepresentation of respondents from both the Italian- and French-speaking language regions and the underrepresentation of those from the German-speaking part. While the use of such a procedure is controversially discussed in the literature (Solon et al., 2015), we decided to perform both weighted and unweighted estimations. In Model 3, we use an alternative dependent variable. It may be argued that a more fine-grained measurement of social media use is more appropriate than a binary indicator. Luckily enough, we were able to rely on a non-binary measure because the "VOTO studies" asked the respondents who answered that they relied on social media for their opinion formation about the strength of their social media use on a scale that ranges from 1 to 10.

Models 3, 4, and 5 account for possible biases caused by the media coverage measure provided by fög. As mentioned in Section 3, the data after VOTO 7 are likely to contain a slightly higher number of articles. To address this issue empirically, we decided to apply three different corrections to this indicator. In Model 3, the number of articles was reduced by 5% for VOTO 8 to VOTO 13. The correction is set at 10% in Model 4 and at 15% in Model 5. As can be seen in Table 2, the results remain

Table 3. Probit and ordered probit two-level random-intercept models explaining individual reliance on social media.

	Standard model (Model 1)	With design weights (Model 2)	Social media intensity (Model 3)	5% media coverage correction (Model 4)	10% media coverage correction (Model 5)	15% media coverage correction (Model 6)
Man	0.283*** (4.65)	0.358*** (5.39)	0.376*** (5.88)	0.360*** (5.32)	0.362*** (5.25)	0.362*** (5.17)
Media coverage	0.0003*** (3.57)	0.0003** (3.25)	0.0003** (2.75)	0.0003** (3.11)	0.0003** (2.95)	0.0003** (2.77)
Man × media coverage	−0.0002* (−2.18)	−0.0002* (−2.22)	−0.0002* (−2.28)	−0.0002* (−2.21)	−0.0002* (−2.19)	−0.0002* (−2.15)
Age	−0.024*** (−32.53)	−0.025*** (−30.77)	−0.025*** (−32.68)	−0.025*** (−30.77)	−0.025*** (−30.77)	−0.025*** (−30.77)
Education level	0.006 (0.55)	0.020 (1.57)	0.021 (1.42)	0.020 (1.56)	0.020 (1.56)	0.020 (1.55)
Political interest	−0.017 (−0.87)	−0.020 (−0.93)	−0.015 (−0.82)	−0.020 (−0.93)	−0.020 (−0.93)	−0.020 (−0.93)
Left–right positioning (0–10)	−0.008 (−1.04)	−0.002 (−0.28)	−0.002 (−0.14)	−0.002 (−0.28)	−0.002 (−0.28)	−0.002 (−0.28)
Swiss People's Party	0.063 (1.37)	0.009 (0.17)	−0.011 (−0.20)	0.009 (0.17)	0.009 (0.17)	0.009 (0.17)
Social Democrat	0.046 (1.13)	0.049 (1.11)	0.101 (1.63)	0.049 (1.11)	0.049 (1.11)	0.049 (1.10)
Liberal	0.001 (0.03)	0.020 (0.46)	0.044 (0.63)	0.020 (0.46)	0.019 (0.45)	0.019 (0.45)
Green	0.011 (0.18)	−0.045 (−0.69)	−0.052 (−0.68)	−0.045 (−0.69)	−0.045 (−0.69)	−0.045 (−0.68)
Christian Democrat	0.055 (1.17)	0.074 (1.45)	0.049 (0.73)	0.074 (1.44)	0.074 (1.44)	0.074 (1.44)
Green Liberal	−0.007 (−0.11)	−0.001 (−0.01)	0.004 (0.05)	−0.001 (−0.01)	−0.001 (−0.01)	−0.001 (−0.01)
Other party	0.066 (1.10)	0.009 (0.13)	0.066 (0.63)	0.009 (0.13)	0.009 (0.13)	0.009 (0.14)
French-speaking part	0.054 (1.76)	0.033 (0.99)	0.030 (0.92)	0.033 (0.99)	0.033 (0.99)	0.033 (0.98)
Italian-speaking part	0.103** (3.13)	0.057 (1.60)	0.057 (1.48)	0.057 (1.60)	0.057 (1.60)	0.057 (1.60)
Discussion frequency	0.010 (0.75)	0.007 (0.49)	0.013 (0.55)	0.007 (0.50)	0.008 (0.51)	0.008 (0.52)
Use of more traditional information sources	0.026*** (31.91)	0.026*** (28.97)	0.026*** (30.63)	0.026*** (28.96)	0.026*** (28.95)	0.026*** (28.94)
Constant/ Cut for Model 3	−0.708*** (−6.09)	−0.798*** (−5.33)	0.682*** (6.44)	−0.707*** (−6.02)	−0.704*** (−5.95)	−0.698*** (−5.85)
Intraclass correlation/ Variance partition coefficient	0.003 (1.20)	0.003 (1.32)	0.002 (1.46)	0.003 (1.37)	0.003 (1.42)	0.003 (1.48)
N individual level	11,468	11,468	11,468	11,468	11,468	11,468
N contextual level	13	13	13	13	13	13

Notes:* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$; *z*-values in brackets; independents and German speakers are the reference categories for partisan groups and language regions.

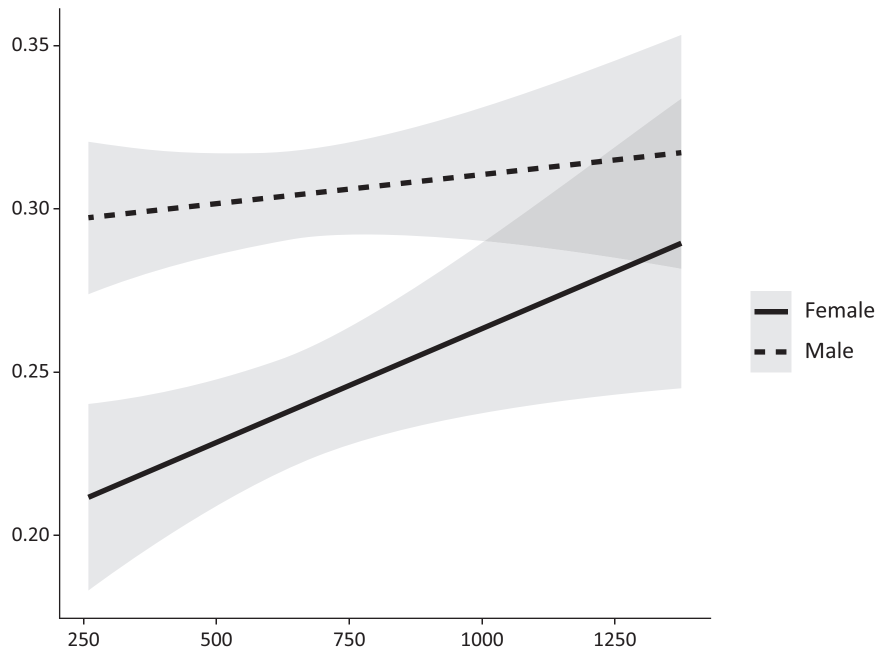

Figure 2. Predicted marginal effects of media coverage on social media use by gender (with 95% confidence interval).

unchanged in terms of significance across all alternative models. The results shown in Model 1 can thus be considered to be robust.

As far as the contextual level is concerned, we included some alternative determinants to media coverage (not shown here). Due to the low number of cases at this level (n = 13), we decided to rely on a similar procedure by separately considering the effects of time (either by using the numbers of the VOTO surveys that range from 1 to 13 or by calculating the daily differences from VOTO 1 for the selected ballots) and paid media (as measured by the number of newspaper ads). We looked at the direct effects of social media and interaction effects with gender. The only association that proved to be significant refers to both time indicators. We find that the reliance on social media increased over time. This is remarkable in that even though this analysis examined a short period of time (September 2016 to September 2020), patterns of saturation could be discerned as to the share of Swiss people using social media for news at least once a week (Newman et al., 2022, p. 107). This finding is in line with another indicator from the same study. Accordingly, the share of Swiss saying that social media are their "main source" of news has increased from 8% in 2016 to 13% in 2021. In any case, due to insignificant interaction terms, it appears that, in the context of direct-democratic ballots, the increased use of social media over time for opinion formation purposes did not contribute to a narrowing of the gender gap.

5. Conclusion

Due to ongoing digital transformations, citizens' reliance on social media has rapidly increased in recent years. However, despite the growing importance, research on individual opinion formation based on digital technologies is still in its infancy. This is especially true in the domain of direct democracy. To the extent that such empirical studies exist, they typically focus on single case studies. Systematic research on the role played by digital technologies in the context of direct democracy can thus be considered a major gap in the academic literature. This is unfortunate, not the least because major challenges such as fake news, disinformation campaigns, or social bots are becoming common features in referenda and initiatives.

In light of the growing importance of digital technologies and their challenges, this article takes an empirical look at citizens' use of social media for opinion formation in the context of Swiss direct-democratic ballots. To that end, we have focused on the gender gap, which constitutes one of the most salient political inequalities in today's democracies. Corroborating previous work, and in line with H1, we find that men are on average about 30% more likely than women to rely on social media for opinion-formation purposes. Given that the data used here indicate that women neither make up for their delay over time nor compensate for their less frequent social media use when it comes to more traditional sources of information than men (results are available from the authors upon request), this finding suggests that the digital gender divide is not likely to disappear anytime soon. This is potentially a cause for concern, especially in light of the expected continuously growing importance of digital media and their crucial role in political communication.

Despite this huge gender gap, our study has detected some considerable variation across ballots This not only

suggests that there is no inevitability when it comes to the persistence of gender gaps, it also highlights the importance of contextual characteristics that have the potential to contribute to a narrowing the digital divide between men and women. In this respect, this empirical analysis has found a statistically significant reduction of the gender gap in social media use in the context of intensive public debates that precede direct-democratic ballots, thereby supporting H2. However, the results supporting the interaction hypothesis must be taken with some caution given that our empirical analysis only relied on 13 observations at the contextual level. Future research may benefit from including more cases to obtain more conclusive results.

In this context, the focus on issues could provide scholars who work on direct democracy with a promising avenue for future research. Indeed, it seems plausible that the likelihood of women relying on social media for opinion formation on referendums and initiatives heavily depends on the issues that are submitted to the ballot. Gender gaps may vanish in thematic areas that directly affect women, such as abortion, or when welfare state issues and environmental protection are at stake (Funk & Gathmann, 2015). Unfortunately, we could not address these issues properly with the data at hand. In the "VOTO studies," the measure for social media use is only available at the level of ballots, which in Switzerland usually include several propositions. In other words, there is a serious identification problem.

Another challenging aspect of the analyzed survey data refers to the fact that only respondents who participated in a given ballot were asked about their reliance on social media for opinion formation purposes. While this choice is understandable from a pragmatic point of view, it begs the question of whether there were biased results due to the varying compositions of citizens across ballots. In view of opposing theoretical expectations, we are reluctant to posit a clear direction of potential biases. On the one hand, an increasing number of participants may decrease the proportion of citizens who rely on social media, given that less politically interested citizens typically get involved in such cases (selection effect). On the other hand, turnout levels have been found to positively depend on campaign intensity (Kriesi, 2005), a fact that may increase the individual likelihood of using social media to come to a voting decision (campaign effect). Additionally, we invite scholars to go beyond developing more fine-grained measures of social media use to also look more carefully at how citizens employ these digital platforms. For examining the latter research question, more qualitative approaches may be more effective.

Finally, we have obtained our findings against the backdrop of a peculiar context—contemporary Swiss direct democracy. This raises the question as to whether the main conclusions reached here travel well to other political contexts. We believe that our basic theoretical arguments can easily be transposed to all kinds of free and fair elections and direct-democratic votes held around the world. However, Switzerland presents a case of a consensus democracy that has been characterized by a respectful political culture, and it may be that gender gaps are higher in more conflictive political contexts where women may be blocked from using social media for political opinion formation. Hence, we would like to encourage scholars to rely on case studies and comparative analyses in order to cumulatively address the generalizability of the results presented in this article.

Acknowledgments

We would like to thank the two anonymous reviewers and the editors of this thematic issue for their compelling comments as well as Junmo Cheong and Lukas Lauener for their valuable support.

Conflict of Interests

The authors declare no conflict of interests.

References

Abendschön, S., & García-Albacete, G. (2021). It's a man's (online) world. Personality traits and the gender gap in online political discussion. *Information, Communication & Society*, *24*(14), 2054–2074.

Arlt, D., Rauchfleisch, A., & Schäfer, M. S. (2019). Between fragmentation and dialogue. Twitter communities and political debate about the Swiss "nuclear withdrawal initiative." *Environmental Communication*, *13*(4), 440–456.

Bäck, H., Debus, M., & Müller, J. (2014). Who takes the parliamentary floor? The role of gender in speech-making the Swedish Riksdag. *Political Research Quarterly*, *67*(3), 504–518.

Bechmann, A., & Lomborg, S. (2013). Mapping actor roles in social media: Different perspectives on value creation in theories of user participation. *New Media & Society*, *15*(5), 765–781.

Bernhard, L. (2012). *Campaign strategy in direct democracy*. Palgrave Macmillan.

Bernhard, L. (2018). What prevents knowledge inequalities among citizens from increasing? Evidence from direct-democratic campaigns in Switzerland. *Studies in Communication Sciences*, *18*(1), 103–116.

Bittner, A., & Goodyear-Grant, E. (2017). Sex isn't gender: Reforming concepts and measurement in the study of public opinion. *Political Behavior*, *39*(4), 1019–1041.

Bode, L. (2017). Closing the gap: Gender parity in political engagement on social media. *Information, Communication & Society*, *20*(4), 587–603.

Bos, A. L., Holman, M. R., Greenlee, J. S., Oxley, Z. M., & Lay, J. C. (2020). 100 years of suffrage and girls still struggle to find their fit in politics. *PS: Political Science & Politics*, *53*(3), 474–478.

Boulianne, S., Koc-Michalska, K., & Vedel, T. (2021). Gender and online politics: Digital media as friend and foe in times of change. *Social Science Computer Review*, *39*(2), 175–180.

Coffé, H. (2013). Women stay local, men go national and global? Gender differences in political interest. *Sex Roles*, 69(5/6), 323–338.

Coffé, H., & Bolzendahl, C. (2010). Same game, different rules? Gender differences in political participation. *Sex Roles*, *62*(5), 318–333.

Del Vicario, M., Zollo, F., Caldarelli, G., Scala, A., & Quattrociocchi, W. (2017). Mapping social dynamics on Facebook: The Brexit debate. *Social Networks*, *50*, 6–16.

de Vreese, C. (Ed.). (2007). *The dynamics of referendum campaigns: An international perspective*. Palgrave Macmillan.

Dimitrova, D. V., Shehata, A., Strömbäck, J., & Nord, L. W. (2014). The effects of digital media on political knowledge and participation in election campaigns: Evidence from panel data. *Communication Research*, *41*(1), 95–118.

Esser, F. (2013). Mediatization as a challenge: Media logic versus political logic. In H. Kriesi, D. Bochsler, J. Matthes, S. Lavenex, M. Bühlmann, & F. Esser (Eds.), *Democracy in the age of globalization and mediatization: Challenges to democracy in the 21st century* (pp. 155–176). Palgrave Macmillan.

Franceschet, S., Krook, M. L., & Tan, N. (Eds.). (2019). *The Palgrave handbook of women's political rights*. Palgrave Macmillan.

Funk, P., & Gathmann, C. (2015). Gender gaps in policy making: Evidence from direct democracy in Switzerland. *Economic Policy*, *30*(81), 141–181.

Grasso, M., & Smith, K. (2022). Gender inequalities in political participation and political engagement among young people in Europe: Are young women less politically engaged than young men? *Politics*, *42*(1), 39–57.

Gundelach, B., & Kalte, D. (2021). Explaining the reversed gender gap in political consumerism: Personality traits as significant mediators. *Swiss Political Science Review*, *27*(1), 41–60.

Halford, S., & Savage, M. (2010). Reconceptualizing digital social inequality. *Information, Communication & Society*, *13*(7), 937–955.

Hargittai, E., & Jennrich, K. (2016). The online participation divide. In M. Lloyd & L. A. Friedland (Eds.), *The communication crisis in America and how to fix it* (pp. 199–213). Palgrave Macmillan.

Hernandez, Y. (2019). The technology gap across generations: How social media affects the youth vote. *Political Analysis*, *20*(1), Article 1. Available at: https://scholarship.shu.edu/pa/vol20/iss1/1

Joiner, R., Stewart, C., Beaney, C., Moon, A., Maras, P., Guiller, J., Gregory, H., Gavin, J., Cromby, J., & Brosnan, M. (2014). Publically different, privately the same: Gender differences and similarities in response to Facebook status updates. *Computers in Human Behavior*, *39*, 165–169.

Kahn, K. F., & Kenney, P. J. (1999). *The spectacle of US Senate campaigns*. Princeton University Press.

Koc-Michalska, K., Schiffrin, A., Lopez, A., Boulianne, S., & Bimber, B. (2021). From online political posting to mansplaining: The gender gap and social media in political discussion. *Social Science Computer Review*, *39*(2), 197–210.

Kriesi, H. (2005). *Direct democratic choice: The Swiss experience*. Lexington.

Kriesi, H. (Ed.). (2011). *Political communication in direct democratic campaigns: Enlightening or manipulating?* Palgrave Macmillan.

Lin, K. Y., & Lu, H. P. (2011). Why people use social networking sites: An empirical study integrating network externalities and motivation theory. *Computers in Human Behavior*, *27*(3), 1152–1161.

Margolis, M., & Resnick, D. (2000). *Politics as usual: The cyberspace "revolution*." SAGE.

Nadim, M., & Fladmoe, A. (2021). Silencing women? Gender and online harassment. *Social Science Computer Review*, *39*(2), 245–258.

Newman, N., Fletcher, R., Robertson, C. T., Eddy, K., & Nielsen, R. K. (2022). *Reuters Institute digital news report 2022*. Reuters Institute for the Study of Journalism.

Owen, D. (2017). New media and political campaign. In K. Kenski & K. Hall Jamieson (Eds.), *The Oxford handbook of political communication* (pp. 1–20). Oxford University Press.

Owen, D., & Deng, W. (2021). Generational differences in digital electoral engagement in the 2020 presidential campaign. In J. C. Baumgartner & T. L. Towner (Eds.), *The internet and the 2020 campaign* (pp. 187–213). Lexington.

Qvortrup, M. (Ed.). (2018). *Referendums around the world*. Palgrave Macmillan.

Robinson, L., Cotten, S. R., Ono, H., Quan-Haase, A., Mesch, G., Chen, W., Schulz, J., Hale, T. M., & Stern, M. J. (2015). Digital inequalities and why they matter. *Information, Communication & Society*, *18*(5), 569–582.

Schiffrin, A., Koc-Michalska, K., & Ferrier, M. (2021). Women in the digital world. *Information, Communication & Society*, *24*(14), 1991–1997.

Solon, G., Haider, S. J., & Wooldridge, J. M. (2015). What are we weighting for? *Journal of Human Resources*, *50*(2), 301–316.

Theocharis, Y., & Van Deth, J. W. (2018). The continuous expansion of citizen participation: A new taxonomy. *European Political Science Review*, *10*(1), 139–163.

Udris, L., Eisenegger, M., & Schneider, J. (2016). News coverage about direct-democratic campaigns in a period of structural crisis. *Journal of Information Policy*, *6*(1), 68–104.

Ulbig, S. G., & Funk, C. L. (1999). Conflict avoidance

and political participation. *Political Behavior*, *21*(3), 265–282.

Verba, S., Burns, N., & Schlozman, K. L. (1997). Knowing and caring about politics: Gender and political engagement. *The Journal of Politics*, *59*(4), 1051–1072.

Xenos, M., Vromen, A., & Loader, B. D. (2014). The great equalizer? Patterns of social media use and youth political engagement in three advanced democracies. *Information, Communication & Society*, *17*(2), 151–167.

About the Authors

Laurent Bernhard is a postdoctoral researcher at the Universities of Lausanne (Research Observatory for Regional Politics) and Zurich (Centre for Democracy Studies). He is currently involved in research projects on opinion formation in Swiss direct democracy (SDD-21) and populism and conspiracy in the Covid-19 pandemic (POPCON), both of which are funded by the Swiss National Science Foundation. His main research interests include direct democracy, political communication, populism, conspiracy theories, asylum policies, and Swiss politics.

Daniel Kübler is professor at the Department of Political Science and co-director of the Centre for Democracy Studies at the University of Zurich. Currently, he is the principal investigator of the research project Swiss Democracy in the 21st century (SDD-21) funded by the Swiss National Science Foundation. His research interests include direct democracy, democratic innovations, governance and democracy, as well as urban politics and governance.

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 43–55
https://doi.org/10.17645/mac.v11i1.6004

Article

Level Playing Field or Politics as Usual? Equalization–Normalization in Direct Democratic Online Campaigns

Michaela Fischer [1,*] and Fabrizio Gilardi [2]

[1] Centre for Democracy Studies Aarau, University of Zurich, Switzerland
[2] Department of Political Science, University of Zurich, Switzerland

* Corresponding author (michaela.fischer@zda.uzh.ch)

Submitted: 22 July 2022 | Accepted: 7 November 2022 | Published: 31 January 2023

Abstract
Are digital technologies leveling the playing field or reinforcing existing power relations and structures? This question lies at the core of the equalization vs. normalization debate. The equalization thesis states that the affordances of digital technologies help less-powerful political actors to compete with their more resource-rich counterparts, thereby overcoming structural disadvantages inherent to the political landscape. The normalization thesis, in contrast, suggests that more powerful and resource-rich political actors outperform their weaker competitors in the digital sphere by establishing a more sophisticated online presence, thus reproducing existing power imbalances. An overwhelming majority of studies on the equalizing vs. normalizing effect of digital technologies focus on electoral campaigns or non-electoral periods. Direct democratic campaigns have not been adequately considered in previous studies. This study exploits the regularly held and institutionalized character of direct democratic votes in Switzerland. Specifically, it investigates political actors' level of activity and generated engagement on Facebook and in newspapers during all direct democratic campaigns from 2010–2020. Applying the equalization vs. normalization lens to Swiss direct democratic campaigns over an 11-year timespan provides new insights into the status-quo preserving or altering effects of digital technologies. We find a tendency toward equalization in terms of Facebook activity and user engagement, and in a comparative perspective: Facebook campaigns are, on average, more balanced than newspaper advertisement campaigns, particularly since 2014.

Keywords
digital campaigning; direct democracy; equalization; normalization; Switzerland

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Digital technologies have become a central pillar of today's political campaigning across the world (e.g., Lilleker et al., 2015). While most scholars agree that digital technologies are ubiquitous in political campaigns, the extent to which they affect the distribution of power among political actors, if at all, is still a matter of heated debate. Are digital technologies redistributing power from major to minor political actors, thereby equalizing or leveling out the playing field, or are they, on the contrary, simply reproducing the offline power structure and thereby normalizing existing imbalances?

While some scholars assert that the internet and social media, with their low entry costs and their affordances for unmediated communication, are powerful means to strengthen the position of traditionally marginalized groups and interests in the political field (e.g., Bene, 2021; Gibson & McAllister, 2015; Gibson et al., 2000; Morris, 2001), others posit that the internet, as it evolves, reproduces the offline political power structure, with major actors asserting their dominant position

(e.g., Margolis et al., 1999). For instance, regularly updating content on social networking sites is more resource-intense than often assumed, and follower numbers often resemble the offline power structure (see Bene, 2021; Spierings & Jacobs, 2019).

Empirical work on the equalizing or normalizing effects of social media draws no unequivocal picture, with some studies finding support for a more level playing field between minor and major political actors (e.g., Bene, 2021; Samuel-Azran et al., 2015) and others pointing towards a normalizing effect (e.g., Strandberg, 2013; Van Aelst et al., 2017). Scholars argue that the ambiguity in the findings stems from methodological heterogeneity (Vanden Eynde & Maddens, 2022), conceptual weaknesses, and the dominance of single-case study designs (Bene, 2021; Gibson, 2020). Most studies on the equalization–normalization debate focus on electoral competitions (e.g., Larsson & Moe, 2014; Samuel-Azran et al., 2015) or non-electoral periods (e.g., Sobaci, 2018) and test their premises over relatively short periods, often covering only one single campaign. Direct democratic campaigns have not been adequately considered in the literature, especially from a long-term perspective, in spite of the steady increase in direct democratic votes across the world (Qvortrup, 2014). The paucity of research on digital technologies and the power distribution among political actors in direct democratic campaigns might be related to the fact that: first, defining the power structure among political actors is more complicated in direct democratic votes than in electoral contexts; and second, referendums and popular initiatives are, compared to elections, relatively rare events in most established democracies. However, even in Switzerland, where citizens are regularly asked to cast their vote on various issues and legislative projects, research on digital technologies and power distribution is limited to electoral competitions (Klinger, 2013), non-electoral periods (Rauchfleisch & Metag, 2020), or both (Rauchfleisch & Metag, 2016). By investigating the effects of digital technologies in the Swiss direct democratic context, this study hopes to add new insights to the equalization–normalization debate as we draw on a large dataset over an 11-year timespan covering a broad range of direct democratic campaigns. In this way, we can explore contextual explanations for the status-quo preserving or altering effects of online communication. Moreover, as one of the first, we study equalization and normalization in a comparative approach by considering both online and offline campaign communication activities of political actors. Specifically, we analyze (a) changes in the activity level and generated engagement of the challenger and the government camp over time, (b) the determinants of equalization or normalization in Swiss direct democratic votes, and (c) the differences between campaign activities in the online and the offline environment. Even though social media performance can be, and has been, conceptualized in various dimensions (adoption, activity, user engagement, follower numbers), we limit our focus to the level of activity and the generated user engagement for two main reasons. First, the longitudinal approach of our study and our focus on a variety of different campaigns with changing political actors renders the consideration of Facebook adoption unsuitable. Second, our focus lies on the strategic decisions of political actors to use Facebook as a channel for their campaign communication and to assess their activities in terms of generated user reactions. Given that follower numbers do not reflect direct user reactions to specific content produced by political actors, we focus on user engagement. We find that in the majority of campaigns from 2010–2020, the government camp outperforms the challenger camp in terms of the number of Facebook posts and, to a lesser extent, in terms of generated engagement—where the challenger camp appears to be keeping pace with the government camp. However, our analyses at the disaggregated level of actors and posts show that the challenger camp outperforms the government camp in terms of activity and user engagement. Moreover, we find a tendency toward equalization in terms of the campaign direction: Facebook campaigns seem, on average, more balanced than newspaper ad campaigns—particularly since 2014.

2. Equalization vs. Normalization and Direct Democracy: The Swiss Case

Direct democracy, together with federalism and consociationalism, is a central cornerstone of the Swiss political system (Vatter, 2020). The Swiss constitution provides for different elements of direct citizen participation, allowing for the creation, abolition, or modification of legislative norms: popular initiatives, optional, and mandatory referenda (Jaquet et al., 2022; Serdült, 2010). Since 1848, the Swiss electorate has voted on a total of 676 proposals at the national level (Swissvotes, 2022). The number of proposals submitted to a popular vote has increased considerably over time (Serdült, 2021), partly due to rising party competition (Leeman, 2015). Direct democratic decisions are binary and require voters to choose between accepting or rejecting a particular proposition. This choice can also be framed as a decision between two opposing camps: the government camp and the challenger camp (Bernhard, 2012; Hänggli & Kriesi, 2010). However, voting in favor or against a proposal has different implications for referenda and initiatives due to their institutional logic. For instance, voting "yes" in a referendum means accepting the government's position, whereas voting "yes" in an initiative implies accepting the challenger's stance. The government camp almost always favors a "yes"-vote in the case of a legislative act qualified for a referendum, and it typically opposes proposals submitted to an initiative vote. The opposite applies to the challenger camp (Bernhard, 2012).

Direct democratic processes in Switzerland are strongly shaped by the political elite (Kriesi, 2005). Empirical work on the power distribution among the

challengers and the government camp in direct democratic campaigns shows that the latter is typically more successful in getting its way in popular votes, particularly if the vote pertains to an initiative (Kriesi, 2006). The strength of the government camp depends, however, on the unity of its internal coalition and the institutional type of the vote (Bernhard, 2012; Kriesi, 2006). Depending on the issue-specific context, the government forms an internal coalition. The coalitional configuration represents a grand coalition if all parties of the federal council (Christian Democratic People's Party [CVP], Free Democratic Party [FDP], Social Democratic Party [SP], Swiss People's Party [SVP]) back the proposal in the case of referendums or oppose it in the case of initiatives. If one party deviates from the grand coalition, the government camp forms a center-right coalition (if the left-wing SP deviates) or a center-left coalition (if one of the center-right parties deviates). If two parties propose a different voting recommendation, the government camp forms a divided coalition (Kriesi, 2005).

In international comparison, Switzerland stands out by its laissez-faire approach to campaign regulation (Reidy & Suiter, 2015). Despite the frequency and institutionalization of popular votes, there are very few binding norms settling how political actors should organize and conduct their campaign activities. Political actors are neither bound to the upper limits of financial resources nor obligated to disclose the sources of campaign contributions (Serdült, 2010). Although the federal government is not entitled to invest public resources in political campaigns directly, the parties composing the executive are free to do so (Jaquet et al., 2022, p. 338).

Finally, regulations on campaign communication appear to privilege the government camp to some extent. Prior to a popular vote, the federal government sends a ballot pamphlet to all eligible citizens. Even though the pamphlet contains arguments for and against a proposal, the government's position is generally presented first and in greater detail (Bernhard, 2012, p. 40). Moreover, the executive is the only actor with the right to outline its official standpoint on radio and TV before each vote. For all other actors, campaigning on electronic media such as TV and radio is forbidden (Serdült, 2010, pp. 170–171). The few campaign regulations in place in Switzerland thus appear to disadvantage the challenger camp. Strandberg (2008) argues that traditionally more marginalized political actors could shift their communication efforts to digital platforms more intensively if confronted with a restrictive offline campaign environment. Our first hypothesis for equalization therefore states that:

> H1a: The challenger camp performs better than the government camp in terms of activity and user engagement on Facebook (absolute equalization).

Alternatively, the structural advantages and the greater visibility of the government camp in the offline campaign environment could enable it to build a stronger follower base and provoke more engagement. In their analysis of media attention in direct democratic campaigns, Gerth and Siegert (2012), for instance, show that the government representatives and the government camp, in general, received the most media attention during the campaign for the 2008 naturalization initiative. Therefore, we could argue that:

> H1b: The government camp performs better than the challenger camp in terms of activity and user engagement on Facebook (absolute normalization).

An additional, more rigorous test for equalization versus normalization is to adopt a comparative approach by considering both online and offline campaign communication activities. As Margolis et al. (1999) point out, for equalization to hold, the "advantages of major parties over minor parties on the Web would be significantly smaller than their advantages over minor parties in the established news media" (p. 33). The Swiss case provides an ideal setting for investigating this claim. As mentioned before, campaign regulations in Switzerland state that campaigning is not allowed on electronic media, apart from the internet. Newspaper advertisements have, therefore, long been one of the most important communication channels in direct democratic campaigns (Bernhard, 2012) and will here be used as a reference framework to map the (offline) power distribution between the challenger and the government camp in direct-democratic campaigns.

Conceptually, our first two hypotheses pertain to the absolute dimension of equalization and normalization. As Bene (2021) argues, one of the reasons for inconclusive findings in the literature is the theoretical confusion underlying the two concepts. Hence, there are at least two dimensions of equalization and normalization. According to the first—or absolute approach—only the existence or non-existence of differences between political actors matters in determining whether digital technologies have an equalizing or normalizing effect. However, the second—or relative—approach highlights the extent of differences rather than their mere presence (Bene, 2021, p. 8). In this study, we are not only considering the differences between political actors on Facebook but are investigating the relative approach in a cross-channel perspective, thus in the context of the broader campaign environment. For equalization in the Swiss case, this implies that the differences between the challenger and the government camp are expected to be less pronounced on Facebook than in traditional channels. In other words:

> H2a: Digital campaigns in Swiss direct democratic votes are more balanced than campaigns in traditional channels (relative equalization).

On the other hand, we would find patterns of normalization if the differences between both camps are

equal to or greater on Facebook than in traditional channels. Hence:

> H2b: Digital campaigns in Swiss direct democratic votes are equally or less balanced than campaigns in traditional channels (relative normalization).

Finally, we are interested in the determinants of equalization and normalization. Previous research suggests that equalization and normalization might be influenced by institutional factors such as the electoral system (Hansen & Kosiara-Pedersen, 2014), the media environment (Strandberg, 2008), and the party system (Samuel-Azran et al., 2015). For the Swiss case, we expect that the different institutional logics of direct democratic instruments might affect whether we find an equalizing or normalizing effect of online campaigning. Challengers in an initiative vote are mobilizing for the creation of novel constitutional norms, aiming to modify the status quo. They are thus leading a "status quo modifying campaign." Challengers in referendum votes, on the other hand, are seeking to prevent a legislative proposal from becoming legally binding. They are therefore mobilizing for the preservation of the status quo and leading a "status quo preserving campaign" (Kriesi & Bernhard, 2011, p. 19). According to Gerber (1999), challengers in status quo modifying campaigns have an even harder time imposing their position than in status quo preserving campaigns (see Bernhard, 2012). Empirical evidence from Swiss direct-democratic campaigns seems to confirm this claim (e.g., Kriesi, 2005). The government camp typically heavily outspends its counterparts in initiative votes in terms of newspaper advertisements, especially if the opposition comes from the left (Kriesi, 2006, p. 618). We could argue that the challenger camp in initiative votes is, therefore, more likely to shift its campaign efforts toward the digital sphere. However, as referendum campaigns are generally more balanced than initiative campaigns (Jaquet et al., 2022, p. 345), challengers should have a higher chance of successfully competing with their counterparts in terms of campaign activities in the online campaign environment. Hence:

> H3: Equalization is more likely in referendum (status quo preserving) campaigns than in initiative (status quo modifying) campaigns.

As mentioned above, the government camp forms a coalition in the run-up to each direct democratic vote. Kriesi (2006) shows that the coalition formation of the government camp predicts the outcome of a vote. The more united the government camp, the higher the chances of its stance being accepted by voters. We could argue that the coalition formation affects not only the outcome of the vote and the overall intensity of the campaign (Kriesi, 2005) but also the power distribution among the challenger and the government camp in their online campaign activities. The center-right coalition is often backed by resource-rich economic interest associations, which provide the necessary mobilization resources, whereas the center-left coalition is mostly supported by trade unions and non-governmental organizations (Kriesi, 2005). This structural advantage of center-right coalitions in Swiss direct-democratic campaigns is well documented (e.g., Kriesi, 2005) and could incentivize political actors opposing the traditionally more powerful center-right coalition to shift their campaign activities toward less resource-dependent online platforms. We, therefore, expect that:

> H4: Equalization is more likely if the government camp forms a center-right coalition than if it forms a center-left coalition.

3. Data and Methods

We draw on Facebook and newspaper advertisement data on all national popular votes in Switzerland from the beginning of 2010 to the end of 2020. Data on newspaper advertisements are provided by Prof. Hanspeter Kriesi and Année Politique Suisse, a monitoring project on Swiss politics and society at the University of Berne. The dataset contains information on the total number and the direction of all newspaper advertisements published in six Swiss newspapers during the four weeks preceding a popular vote. The selected newspapers are divided by language (German-speaking and French-speaking), type (quality and tabloid), and ideological orientation (center-left and center-right).

Our Facebook dataset includes the official pages of national political parties that have run for parliamentary election over the selected period, as well as their youth sections, their cantonal sections, and cantonal youth sections. The women's section of the national and cantonal parties were included if they had been active as initiators, supporters, or opponents of a proposal voted on between 2010 and 2020. Besides political parties, the dataset contains the official pages of associations (e.g., trade associations, employers' associations), organizations (e.g., NPOs, NGOs, foundations), and trade unions that had been identified as initiators, supporters, or opponents in at least one of the popular votes from 2010–2020 based on the *Swissvotes* (2022) dataset. Given the low degree of personalization in most Swiss direct-democratic campaigns, we did not include individual actors' Facebook pages. In total, 473 Facebook pages are included in our dataset. For each actor, we downloaded all Facebook posts, including their engagement metrics, published between 2010 and 2020 from the Crowdtangle platform. For each campaign, we included only posts related to the proposal in question. To ensure that the posts were related to the respective campaign, we filtered the complete dataset by keywords for each campaign. This strategy was selected to obtain the most complete dataset possible by ensuring that actors who were active during a campaign (but not explicitly listed in

the *Swissvotes* 2022 dataset) are included in the dataset. For instance, if organization A had been active in campaign X in 2019, the total number of its posts from 2010 to 2020 was downloaded. However, if it had not posted anything related to previous campaigns, only its posts related to campaign X were included. Yet, if it did post something in favor of, or against, a previously held vote, e.g., campaign Y, all posts related to campaign X and campaign Y were included. Next, we coded the direction of the posts according to the slogans formulated by each actor. Slogans for each popular vote held in Switzerland are published in the *Swissvotes* (2022) database. In the cases where the actor was not listed in the database, we used the posts to identify their position as either in favor or against a ballot proposition. To ensure comparability with the newspaper advertisement data, we limited our data collection on Facebook campaigning to the four weeks preceding each vote. On average, 73 actors (27 from the challenger camp and 46 from the government camp) generated one or more Facebook posts per campaign.

First, the study analyzes the activity level and user engagement of the challenger and the government camp over time from 2010–2020. Activity level is indicated by the number of posts published by each camp, and user engagement is measured by the sum of the number of likes, comments, shares, and emotional reactions for each post. Second, we use regression analysis to investigate the determinants of equalization or normalization in Swiss direct-democratic campaigns. Our dependent variables for equalization are the number of posts and the overall engagement generated by both camps during the four weeks preceding each vote. Third, campaign activities on Facebook are compared to the offline campaign environment, mapped by the number of newspaper advertisements published by each camp. The goal is to investigate whether Facebook campaigns are more, equally, or less balanced than newspaper campaigns. Kriesi (2005) introduced the term "campaign direction" to measure the balance of a campaign in newspapers. Following his approach, we operationalize the campaign direction by taking the differences between the share of Facebook posts in favor and the share of posts opposing the government's position and comparing them to the differences between the share of newspaper ads in favor of and against the government's position. The values range from −1 to 1, where 0 indicates a completely balanced campaign. Before moving to the empirical findings, we want to address a major limitation of our comparative approach. Despite some important differences, the most suitable equivalent to offline newspaper advertisements are Facebook ads or sponsored Facebook posts rather than cost-free Facebook posts. Hence, Facebook posts are not easily comparable to newspaper ads for two main reasons: first, the costs of buying newspaper ads exceed the costs of producing online posts many times over. For instance, political actors must spend 11,300 Swiss francs to buy a quarter-page ad in the tabloid newspaper *Blick* (Ringier Advertising, n.d.), whereas posting on social media is, apart from personnel expenses, cost-free. Second, while the space to address one's arguments in newspaper ads is often limited to one or two sentences, Facebook posts enable political actors to highlight their positions in multiple ways: through text, visual, and audio-visual content. Despite these differences, we decided to compare newspaper ads and Facebook posts for two main reasons: one being practical and the other conceptual. First, although Facebook provides access to paid Facebook ads and sponsored posts through the Facebook Ad Library, we cannot assume data is complete, as Swiss political actors' disclosure of their online advertising activities is voluntary (Fichter, 2019). Moreover, online advertising is a relatively new campaigning strategy, and the data available on the Facebook Ad Library does not go further back than 2019, which is inconsistent with the longitudinal approach of this study. Second, from a conceptual perspective, our goal was to compare the most important online and offline channels for campaign communication: newspaper ads for the offline sphere; Facebook for the online (Kemp, 2022).

We test our hypotheses with two distinct empirical strategies: first, we evaluate the differences between the challenger camp and the government camp at the aggregate level—the reason, therefore, is twofold. The analysis at the aggregate level allows us to investigate the development of campaign activities by the challenger and the government camp over time. Thereby, we can determine whether the challenger camp or the government camp was more successful in terms of Facebook activity and generated user engagement over the full range of campaigns from 2010–2020. Second, by aggregating our data, we can compare the efforts by both camps on two different channels (Facebook and newspapers), which is necessary to test our hypotheses on relative equalization and normalization. However, while this approach is useful for detecting overall patterns, it does not enable us to evaluate our hypotheses at the actor— and post-level. Therefore, in the second step, we move our analysis from the aggregate level to a regression-based approach to test our expectations considering the control variables we identified as most relevant to our hypotheses.

4. Findings

4.1. Absolute Equalization vs. Normalization

From the beginning of 2010 to the end of 2020, the Swiss electorate voted on 91 policy proposals. Over half of the ballot proposals accounted for popular initiatives (49 votes). In 14 cases, Swiss voters were called to the ballot boxes for a mandatory referendum, and 28 times they voted in an optional referendum. In almost all cases, both challengers and the government camp used Facebook as a communication channel for their campaigns, although the extent of campaign activities

changed significantly over time. In total, the government camp published 10,211 Facebook posts and generated, on average, 39 engagements per post, whereas the challenger camp published 8,047 with an average of 64 engagements (see Figure 1 for distribution).

Figure 2 shows the average number of Facebook posts published in the four weeks before a popular vote in each year and the generated engagement, disaggregated into challenger, and government camps. At first, the difference between the challenger camp and the government camp in terms of the number of Facebook posts was marginal, but it increased slightly from 2012–2015, with the government camp outperforming the challengers. Between 2015–2016, both camps were on par, before the government camp again took the lead from 2016 onwards. In 2020 the challenger camp considerably surpassed its counterpart. A slightly different picture emerges if we consider the level of engagement.

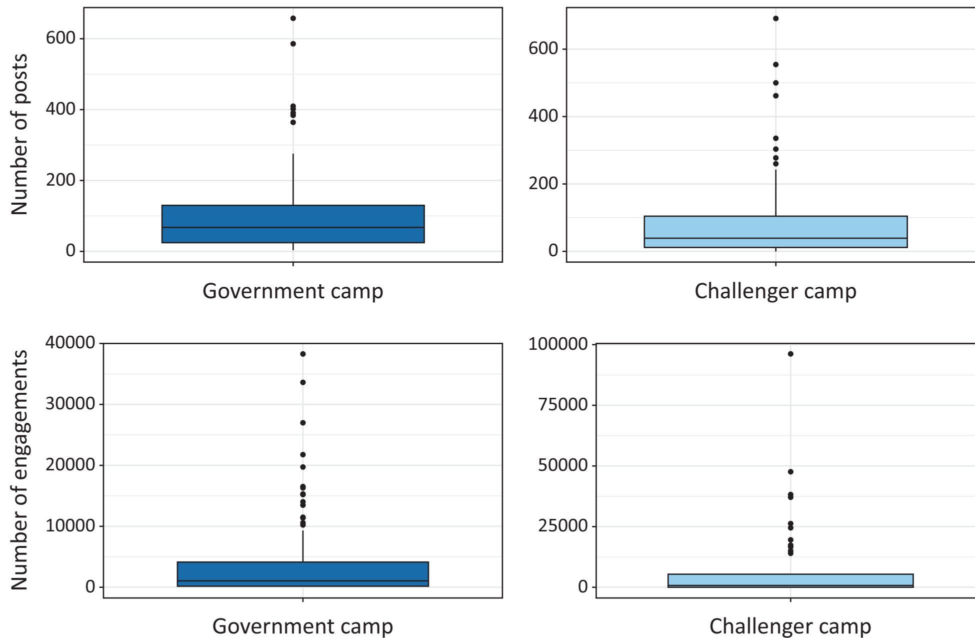

Figure 1. Distribution of number of Facebook posts and user engagements by camp from 2010 to 2020.

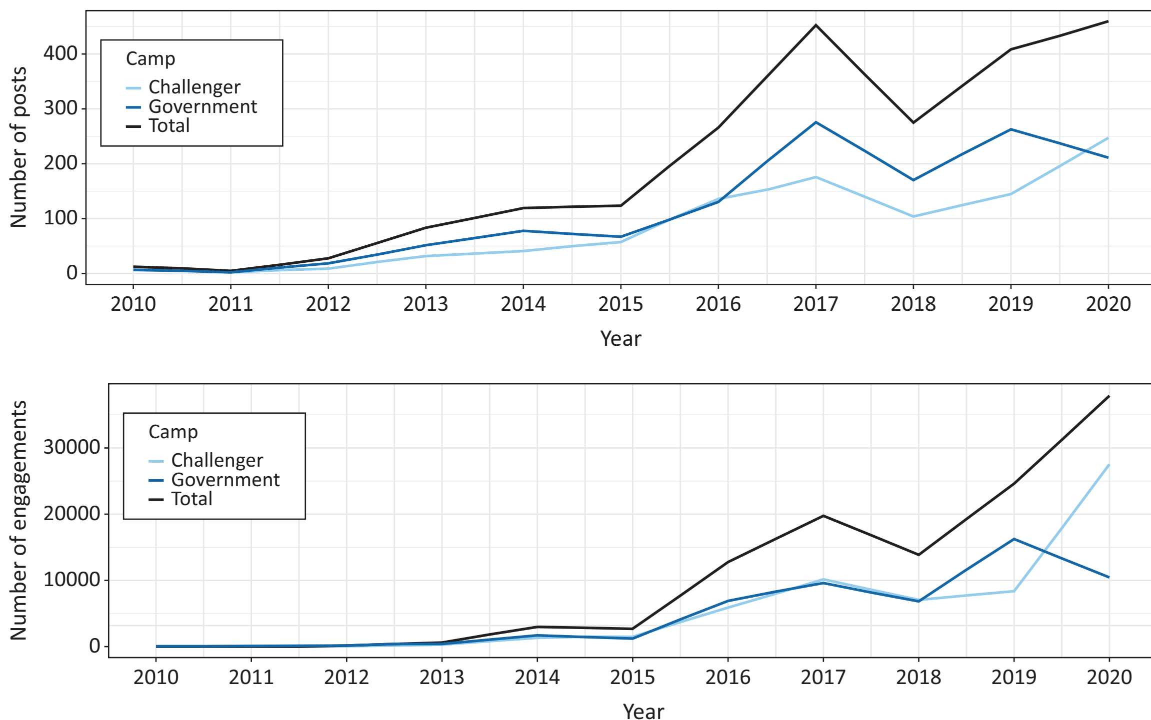

Figure 2. Developments of the number of Facebook posts and generated engagements by camp over time.

While both camps displayed similar levels of engagement until 2018, the challenger camp outperformed the government camp by a considerable extent in 2020. The challenger camp's predominance in terms of activity and engagement in 2020 could be linked to the intensive campaigns around the "responsible business initiative" and the "moderate immigration initiative."

Based on Bene's (2021) conceptualization and our hypotheses, absolute equalization is indicated when the challenger camp performs better on Facebook in terms of activity and engagement than the government camp. In contrast, absolute normalization is present if the government camp performs better. Figure 3 shows the number of campaigns in which each camp outperforms its counterpart in terms of Facebook activity and engagement. As for Facebook activity, the government camp prevails in the majority of campaigns between 2010–2020. In 59.2% of all initiatives, 57.1% of all optional, and 92.9% of all mandatory referendums, the government camp published more Facebook posts than the challengers (Figure 3[a]). As outlined before, a slightly different picture emerges for the engagement generated by each camp. The government camp seems less likely to prevail in terms of resonance. Put in substantive terms, the government camp outperforms the challenger camp in 51% of all initiatives, 53.6% of all optional, and 64.3% of all mandatory referendums (Figure 3[b]). A majority of votes (around 80%) in which the challenger camp outperforms the government camp was initiated and/or supported by left-wing political actors (see Figures A and B in the Supplementary File) and most frequently addressed social, environmental, or economic policy proposals. In absolute terms, our data appear to support the normalization thesis for the level of activity and, to a lesser extent, the level of engagement. Hence, the government camp seems to assert its position of structural advantage vis-à-vis the challenger camp online, particularly regarding the number of posts. However, moving the analysis from the aggregate level to a regression-based approach at the actor and post level sheds a different light on the equalizing or normalizing effect of Facebook communication.

Table 1 displays the results of our regression analyses. First, columns 1 and 5 show that the challenger camp outperforms the government camp in terms of the number of Facebook posts and the generated engagement, confirming our first hypothesis (H1a). The expected number of Facebook posts is 32% higher for the challenger camp than for the government camp. The number of engagements is 35% higher for the challenger camp than for the government camp. Disaggregated into reactions (likes, emotional reactions, and comments) and shares, we find that the challenger camp's posts are expected to generate 26% more reactions and 90% more shares than posts published by the government camp (Table A in the Supplementary File). Second, the differences between both activity and overall engagement generated by the challenger and the government camp

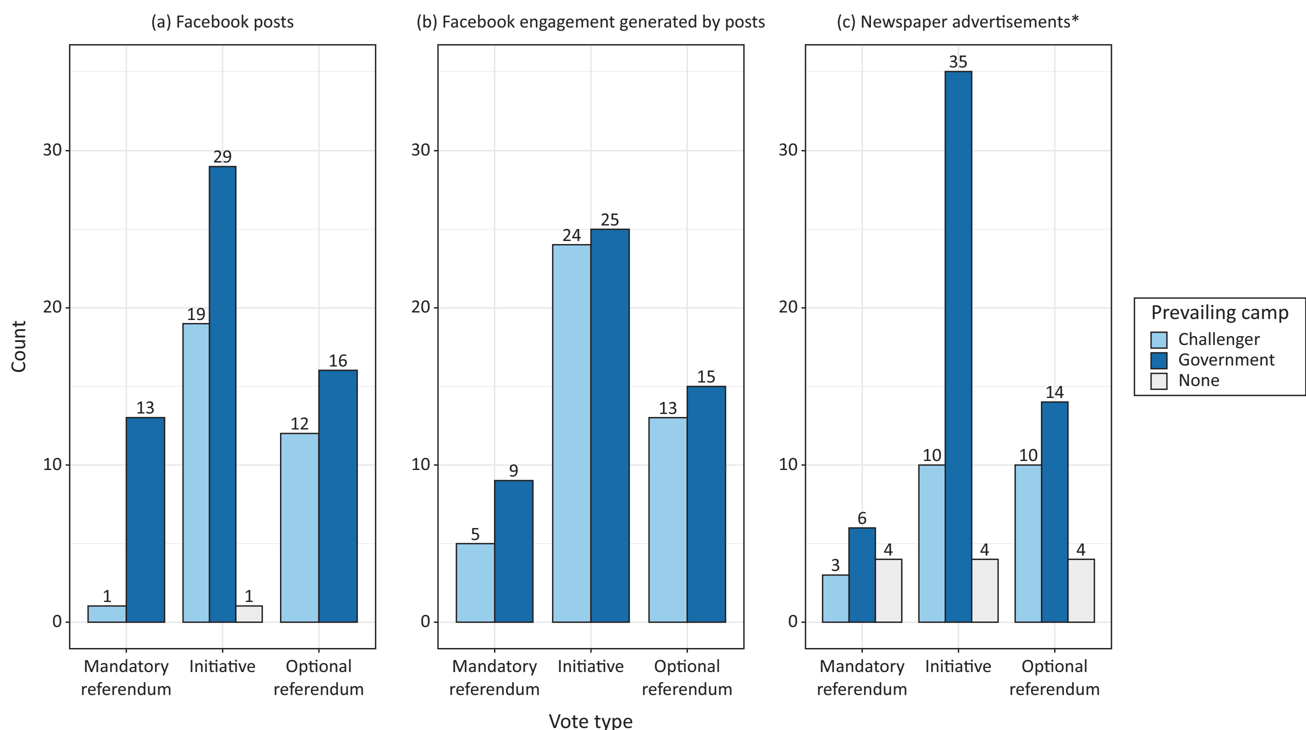

Figure 3. Number of direct democratic votes in which the government camp or the challenger camp prevailed in terms of Facebook activity, Facebook engagement generated by the posts, and offline campaign activity. Note: * = Removed one mandatory referendum ("additional financing of the old-age pension through an increase in value-added tax") due to missing data.

Table 1. *Quasi-poisson* regression analysis of predictors for Facebook activity and user engagement (standard errors clustered on vote date).

	Activity				*Engagement*			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Challenger camp	0.28*** (0.06)	0.15 (0.12)	0.31** (0.12)	0.18 (0.13)	0.30** (0.14)	0.17 (0.14)	0.23 (0.21)	0.08 (0.28)
Initiative	0.79*** (0.21)	0.70*** (0.19)	0.78*** (0.21)	0.69*** (0.19)	0.21** (0.06)	0.17 (0.14)	0.20** (0.08)	0.15 (0.14)
Optional referendum	0.65*** (0.23)	0.69*** (0.20)	0.65*** (0.23)	0.68*** (0.20)	0.30*** (0.09)	0.25** (0.12)	0.31*** (0.09)	0.24* (0.13)
Center-right coalition	−0.30*** (0.10)	−0.30*** (0.10)	−0.28*** (0.09)	−0.26*** (0.09)	0.10 (0.18)	0.10 (0.18)	0.20 (0.24)	0.20 (0.23)
Center-left coalition					0.46*** (0.14)	0.45*** (0.14)	0.34* (0.18)	0.33* (0.18)
Divided coalition	−0.17 (0.10)	−0.19 (0.12)	−0.17 (0.11)	−0.19 (0.12)	0.06 (0.12)	0.06 (0.12)	0.03 (0.11)	0.03 (0.11)
Grand coalition (opposition from left and right-wing parties)	−0.35*** (0.11)	−0.36*** (0.14)	−0.34*** (0.11)	−0.34** (0.13)	0.43** (0.16)	0.42** (0.16)	0.40** (0.17)	0.37** (0.16)
Grand coalition (opposition from right-wing parties)	−0.12 (0.10)	−0.11 (0.10)	−0.11 (0.10)	−0.10 (0.10)	−0.32 (0.28)	−0.33 (0.26)	−0.34 (0.29)	−0.35 (0.28)
Grand coalition (opposition from left-wing parties)	−0.36*** (0.05)	−0.35*** (0.05)	−0.36*** (0.05)	−0.35*** (0.05)	0.19 (0.17)	0.19 (0.16)	0.21 (0.18)	0.20 (0.17)
Challenger camp × optional referendum		−0.02 (0.15)		−0.01 (0.14)		0.13 (0.21)		0.17 (0.27)
Challenger camp × initiative		0.24 (0.16)		0.27 (0.17)		0.13 (0.24)		0.13 (0.23)
Challenger camp × center-right coalition			−0.05 (0.16)	−0.10 (0.15)			−0.20 (0.29)	−0.18 (0.25)
Challenger camp × center-left coalition							0.46 (0.38)	0.47 (0.38)
Fixed-effects								
Vote date Actor	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
					Yes	Yes	Yes	Yes
Observations	6,607	6,607	6,607	6,607	18,255	18,255	18,255	18,255
Squared Correlation	0.05580	0.05805	0.05594	0.05848	0.20003	0.20033	0.20256	0.20283

Note: Significance codes—*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

do not depend on the type of direct democratic vote (columns 2 and 6), nor the coalitional configuration of the government camp (columns 3 and 7). The coefficients of the interaction terms are not statistically significant. Therefore, the results do not support hypotheses 3 and 4 for the number of posts and the overall engagement. However, if we analyze the engagement dimensions separately, we find that the challenger camp is more likely to outperform the government camp in terms of the expected number of shares generated by their posts in optional referenda than in initiatives. This finding supports our third hypothesis (column 8, Table A in the Supplementary File). In terms of shares, the challenger camp is more likely to outperform the government camp if the latter forms a center-left coalition rather than a center-right coalition. This result is contrary to hypothesis 4. Third, columns 4 and 8 show that the results do not change if we include all interaction terms

in the same model. Finally, in all models, the number of posts is higher for initiatives than for optional referenda campaigns, whereas engagement is higher for optional referenda than for initiatives, and for center-left coalitions compared to center-right coalitions.

4.2. Relative Equalization vs. Normalization

Finally, we compare campaign activities on different channels to get a more nuanced picture of the effects of digital technologies on power distribution in direct-democratic campaigns. As Swiss law prohibits campaigning on electronic media such as radio and TV, newspaper advertisements seem a suitable means to map the offline campaign environment and the power structure in each campaign. Figure 3(c) shows the number of campaigns in which the government camp and the challenger camp prevailed in terms of offline campaign activity. Compared to the online environment, the government camp prevails in considerably more initiative campaigns (+10%). In 71.4% of all initiatives, the government camp published more newspaper ads than the challenger camp. However, the government camp prevails in fewer campaigns preceding a mandatory referendum (6 of 14) which might be explained by the fact that in four cases, neither the government camp nor the challenger camp published any newspaper ads. Finally, for optional referenda, the differences are marginal, with the government camp prevailing in 14 of 28 cases. These findings suggest that digital technologies are, to some extent, enabling challengers in initiative campaigns to compete with the traditionally more powerful government camp.

The cross-channel relative approach to the equalization–normalization debate focuses on the extent of differences between the challengers and the government camp on different channels. For the equalization hypothesis to be verified, the gap between both camps in terms of campaign activity must be smaller on Facebook than in newspapers, and vice versa for normalization. Figure 4 shows the campaign direction on Facebook and in newspapers for all campaigns from 2010–2020. The difference between the challengers and the government camp in terms of their Facebook campaign activity is closer to 0 than the difference between both camps in terms of newspaper advertisements. Facebook campaigns are thus, on average, more balanced than campaigns that use traditional communication channels, particularly since 2014 (as seen in Figure 5).

5. Discussion and Conclusion

This study has investigated whether digital technologies like Facebook are rebalancing the power distribution among political actors or whether existing power imbalances are simply transferred from the offline to the online sphere. We have examined the relative approach to equalization and normalization from a comparative perspective by considering both online and offline campaign activities, which, as we argue, adds to the assessment of the effects of digital technologies. In contrast to previous research on the equalization–normalization debate, we focused on direct democratic campaigns in a longitudinal perspective, and we empirically tested contextual explanations for the status quo maintaining or altering effects of online communication. Thereby, we have taken a step towards addressing an important gap in the literature as most studies focus on singular (election) campaigns, thus precluding the possibility of studying context-specific factors.

This article shows that the effects of Facebook campaigning in Swiss direct-democratic campaigns depend on the dimensions under study and the

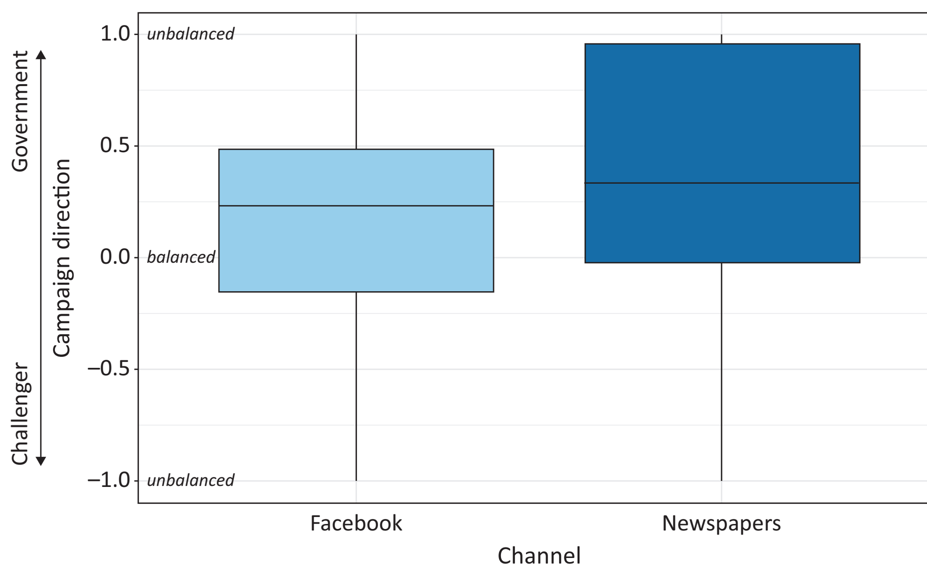

Figure 4. Difference between the government camp and the challenger camp (campaign direction) in terms of Facebook posts and newspaper advertisements from 2010–2020.

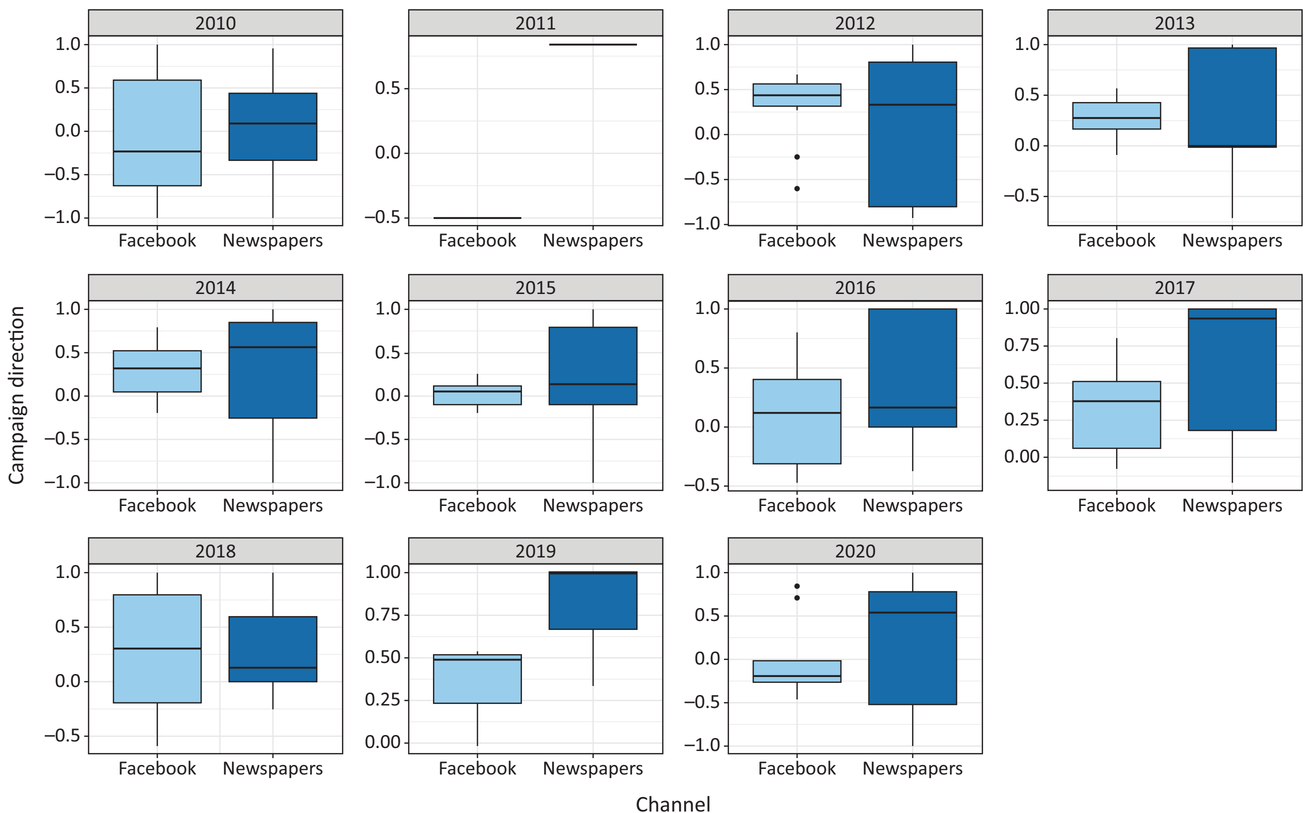

Figure 5. Development of the difference between the government camp and the challenger camp (= campaign direction) in terms of Facebook posts and newspaper advertisements from 2010 to 2020.

conceptualization of equalization and normalization, confirming previous findings in the literature (e.g., Bene, 2021). In a majority of direct democratic votes from 2010–2020, the traditionally more powerful government camp succeeds in outperforming the challenger camp in terms of the number of Facebook posts published in the four weeks preceding a vote and, to a lesser degree, the engagement generated by their posts, thus indicating a tendency towards "politics as usual." However, we find a tendency toward equalization at the disaggregated level of actors and posts as the challenger camp slightly outperforms the government camp both in terms of activity and user engagement. From a comparative perspective, we find that the challenger camp is more likely to keep pace with the government camp in the online sphere, as Facebook campaigns are, on average, more balanced than newspaper campaigns, particularly since 2014. However, this finding is limited to the activity level of both camps as there is no equivalent to engagement data in the offline sphere; hence, no meaningful comparison can be drawn. Overall, this article highlights the necessity to study equalization and normalization from a comparative perspective by considering different communication channels, as today's campaigns increasingly take place in a hypermedia environment (Lilleker et al., 2015).

This study is not without limitations. First, we have focused exclusively on Facebook and have not considered other online communication channels such as Twitter or Instagram. Our findings thus only apply to Facebook and are not generalizable to social media as a whole or other platforms as they have their particular audiences and affordances—something that might affect the strategies and effects of online campaigning (e.g., Kreiss et al., 2018). Yet the variance in affordances applies not only across but also within communication platforms, as the case of Facebook illustrates. Besides publicly available and cost-free campaign activities such as Facebook posting, the platform also allows political actors to target paid Facebook ads to specific audiences (e.g., Dobber et al., 2019). Following heated controversies and transparency concerns, Facebook ads and information on the publishers and the resources spent are now publicly available on the Facebook Ad Library. In Switzerland, however, the collection of Facebook ads is expected to be incomplete due to the disclosure of online advertising activities being voluntary (Fichter, 2019). Therefore, we had to limit our analysis to publicly available Facebook posts. For a more comprehensive assessment of the equalization–normalization thesis, however, studies should ideally keep up-to-date with the fast-paced development of technological innovations, including social media's particular and ever-expanding affordances as recent research has done by including digital advertising in their analyses (e.g., Fowler et al., 2021; Vanden Eynde & Maddens, 2022). Finally,

our conceptualization of more and less powerful political actors in the Swiss direct democratic context may be arguably too rough and not easily transferable to direct democratic campaigns beyond Switzerland. It is true that the government camp, and particularly the challenger camp, is composed of varying actors depending on the issue-specific context. At the disaggregated level, our study reveals little about exactly which actors are most active and successful in terms of online campaigning.

Nevertheless, the distinction between the challenger and the government camp seems useful and, indeed, necessary to study a great variety of direct democratic campaigns over time. A more fine-grained analysis of the actors composing each camp should be subject to further research, as should the question of whether a more level playing field in the online sphere is reflected in the outcomes of direct democratic votes. Gibson and McAllister (2015) put it this way: Even if minor political actors are keeping pace with their major counterparts in the digital sphere, if they are "not gaining any inroads into popular support, then it becomes difficult to see how this is leading to a rebalancing of power within the system" (p. 530). Hence, our exploratory study provides some preliminary evidence for changing patterns and dynamics in Swiss direct democratic campaigns and should be regarded as a starting point for more in-depth analyses of these shifts' underlying causes and consequences.

Acknowledgments

We thank Professor Hanspeter Kriesi and Année Politique Suisse for providing access to their datasets. Furthermore, we are grateful to the two anonymous reviewers and the editors of this issue for their helpful suggestions.

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 author (unedited).

References

Bene, M. (2021). Who reaps the benefits? A cross-country investigation of the absolute and relative normalization and equalization theses in the 2019 European Parliament elections. *New Media & Society*. Advance online publication. https://doi.org/10.1177/14614448211019688

Bernhard, L. (2012). *Campaign strategy in direct democracy*. Palgrave Macmillan. https://doi.org/10.1057/9781137011343

Dobber, T., Fathaigh, R. Ó., & Zuiderveen Borgesius, F. (2019). The regulation of online political micro-targeting in Europe. *Internet Policy Review*, *8*(4), 1–20. https://doi.org/10.14763/2019.4.1440

Fichter, A. (2019, July 18). Der nackteste Wahlkampf aller Zeiten [The most naked election campaign ever]. *Republik*. https://www.republik.ch/2019/07/18/der-nackteste-wahlkampf-aller-zeiten

Fowler, E. F., Franz, M. M., Martin, G. J., Peskowitz, Z., & Ridout, T. N. (2021). Political advertising online and offline. *American Political Science Review*, *115*(1), 130–149. https://doi.org/10.1017/S0003055420000696

Gerber, E. R. (1999). *The populist paradox: Interest group influence and the promise of direct legislation*. Princeton University Press. https://doi.org/10.1515/9781400823307

Gerth, M. A., & Siegert, G. (2012). Patterns of consistence and constriction: How news media frame the coverage of direct democratic campaigns. *American Behavioral Scientist*, *56*(3), 279–299. https://doi.org/10.1177/0002764211426326

Gibson, R. K. (2020). *When the nerds go marching in: How digital technology moved from the margins to the mainstream of political campaigns*. Oxford University Press. https://doi.org/10.1093/oso/9780195397789.001.0001

Gibson, R. K., & McAllister, I. (2015). Normalising or equalising party competition? Assessing the impact of the web on election campaigning. *Political Studies*, *63*(3), 529–547. https://doi.org/10.1111/1467-9248.12107

Gibson, R. K., Newell, J. L., & Ward, S. J. (2000). New parties, new media: Italian party politics and the internet. *South European Society and Politics*, *5*(1), 123–136. https://doi.org/10.1080/13608740508539595

Hänggli, R., & Kriesi, H. (2010). Political framing strategies and their impact on media framing in a Swiss direct-democratic campaign. *Political Communication*, *27*(2), 141–157. https://doi.org/10.1080/10584600903501484

Hansen, K. M., & Kosiara-Pedersen, K. (2014). Cyber-campaigning in Denmark: Application and effects of candidate campaigning. *Journal of Information Technology & Politics*, *11*(2), 206–219. https://doi.org/10.1080/19331681.2014.895476

Jaquet, J. M., Sciarini, P., & Gava, R. (2022). Can't buy me votes? Campaign spending and the outcome of direct democratic votes. *West European Politics*, *45*(2), 335–359. https://doi.org/10.1080/01402382.2020.1852374

Kemp, S. (2022, February 15). *Digital 2022: Switzerland*. Datareportal. https://datareportal.com/reports/digital-2022-switzerland

Klinger, U. (2013). Mastering the art of social media: Swiss parties, the 2011 national election and digital challenges. *Information, Communication & Society*, *16*(5), 717–736. https://doi.org/10.1080/1369118X.2013.782329

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 Communication*, *35*(1), 8–31. https://doi.org/10.1080/10584609.2017.1334727

Kriesi, H. (2005). *Direct democratic choice*. Lexington Books.

Kriesi, H. (2006). Role of the political elite in Swiss direct-democratic votes. *Party Politics*, *12*(5), 599–622. https://doi.org/10.1177/1354068806066790

Kriesi, H., & Bernhard, L. (2011). The context of the campaigns. In H. Kriesi (Ed.), *Political communication in direct democratic campaigns: Enlightening or manipulating?* (pp. 17–38). Palgrave Macmillan. https://doi.org/10.1057/9780230343214

Larsson, A. O., & Moe, H. (2014). Triumph of the underdogs? Comparing Twitter use by political actors during two Norwegian election campaigns. *SAGE Open*, *4*(4), 1–13. https://doi.org/10.1177/2158244014559015

Leeman, L. (2015). Political conflict and direct democracy: Explaining initiative use 1920–2011. *Swiss Political Science Review*, *21*(4), 596–616. https://doi.org/10.1111/spsr.12190

Lilleker, D. G., Tenscher, J., & Štětka, V. (2015). Towards hypermedia campaigning? Perceptions of new media's importance for campaigning by party strategists in comparative perspective. *Information, Communication & Society*, *18*(7), 747–765. https://doi.org/10.1080/1369118X.2014.993679

Margolis, M., Resnick, D., & Wolfe, D. J. (1999). Party competition on the internet in the United States and Britain. *Harvard International Journal of Press/Politics*, *4*(4), 24–47. https://doi.org/10.1177/1081180X9900400403

Morris, D. (2001). Direct democracy and the internet. *Loyola of Los Angeles Law Review*, *34*(3), 1033–1054. https://digitalcommons.lmu.edu/llr/vol34/iss3/5

Qvortrup, M. (Ed.). (2014). *Referendums around the world: The continued growth of direct democracy*. Palgrave Macmillan. https://doi.org/10.1057/9781137314703

Rauchfleisch, A., & Metag, J. (2016). The special case of Switzerland: Swiss politicians on Twitter. *New Media & Society*, *18*(10), 2413–2431. https://doi.org/10.1177/1461444815586982

Rauchfleisch, A., & Metag, J. (2020). Beyond normalization and equalization on Twitter: Politicians' Twitter use during non-election times and influences of media attention. *Journal of Applied Journalism & Media Studies*, *9*(2), 169–189. https://doi.org/10.1386/ajms_00021_1

Reidy, T., & Suiter, J. (2015). Do rules matter? Categorizing the regulation of referendum campaigns. *Electoral Studies*, *38*, 159–169. https://doi.org/10.1016/j.electstud.2015.02.011

Ringier Advertising. (n.d.). *Blick*. https://www.ringier-advertising.ch/portfolio/print/blick

Samuel-Azran, T., Yarchi, M., & Wolfsfeld, G. (2015). Equalization versus normalization: Facebook and the 2013 Israeli elections. *Social Media + Society*, *1*(2), 1–9. https://doi.org/10.1177/2056305115605861

Serdült, U. (2010). Referendum campaign regulations in Switzerland. In K. G. Lutz & S. Hug (Eds.), *Financing referendum campaigns* (pp. 165–179). Palgrave Macmillan. https://doi.org/10.1057/9780230248656_11

Serdült, U. (2021). The referendum experience in Switzerland. In J. Smith (Ed.), *The Palgrave handbook of European referendums* (pp. 203–224). Palgrave Macmillan. https://doi.org/10.1007/978-3-030-55803-1_10

Sobaci, M. Z. (2018). Inter-party competition on Facebook in a non-election period in Turkey: Equalization or normalization? *Southeast European and Black Sea Studies*, *18*(4), 573–591. https://doi.org/10.1080/14683857.2018.1548140

Spierings, N., & Jacobs, K. (2019). Political parties and social media campaigning: A qualitative comparative analysis of parties' professional Facebook and Twitter use in the 2010 and 2012 Dutch elections. *Acta Politica*, *54*, 145–173. https://doi.org/10.1057/s41269-018-0079-z

Strandberg, K. (2008). Online electoral competition in different settings: A comparative meta-analysis of the research on party websites and online electoral competition. *Party Politics*, *14*(2), 223–244. https://doi.org/10.1177/1354068807085891

Strandberg, K. (2013). A social media revolution or just a case of history repeating itself? The use of social media in the 2011 Finnish parliamentary elections. *New Media & Society*, *15*(8), 1329–1347. https://doi.org/10.1177/1461444812470612

Swissvotes. (2022). *Swissvotes—The database on the Swiss popular votes* [Data set]. Année Politique Suisse, University of Bern. https://swissvotes.ch/votes

Van Aelst, P., van Erkel, P., D'heer, E., & Harder, R. A. (2017). Who is leading the campaign charts? Comparing individual popularity on old and new media. *Information, Communication & Society*, *20*(5), 715–732. https://doi.org/10.1080/1369118X.2016.1203973

Vanden Eynde, G., & Maddens, B. (2022). Explaining digital campaign expenses: The case of the 2018 legislative elections in Colombia. *Journal of Information Technology & Politics*, *19*(3), 302–315. https://doi.org/10.1080/19331681.2021.1973643

Vatter, A. (2020). *Das politische System der Schweiz* [The Swiss political system]. Nomos.

About the Authors

Michaela Fischer is a PhD candidate at the Centre for Democracy Studies Aarau at the University of Zurich. She holds an MA degree in political science from the University of Zurich and has worked as a trainee at Eurac Research (Bolzano, Italy). Currently, she is working on her PhD project about digital campaigning in direct democratic votes. Her research interests include political communication and political parties.

Fabrizio Gilardi is professor of policy analysis in the Department of Political Science at the University of Zurich. His research agenda focuses on the implications of digital technology for politics and democracy, which he studies particularly in the context of the ERC Advanced Grant Problem Definition in the Digital Democracy (PRODIGI, 2021–2025). His latest book is *Digital Technology, Politics, and Policy-Making* (Cambridge University Press, Elements in Public Policy Series).

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 56–68
https://doi.org/10.17645/mac.v11i1.6021

Article

Referendum Campaigns in Hybrid Media Systems: Insights From the New Zealand Cannabis Legalisation Referendum

Marta Rychert * and Chris Wilkins

SHORE & Whāriki Research Centre, Massey University, New Zealand

* Corresponding author (m.rychert@massey.ac.nz)

Submitted: 27 July 2022 | Accepted: 11 January 2023 | Published: 31 January 2023

Abstract
During New Zealand's 2020 cannabis legalisation referendum, advocacy groups on both sides widely debated the issue, utilising "older" and "newer" media channels to strategically influence voters, including through appearances in traditional media and paid advertising campaigns on Facebook. Comparatively little is known about the campaign strategies used by each camp and how they leveraged the hybrid media environment to advocate for their positions. We analyse the cannabis legalisation referendum campaigns using primary data from our digital ethnographic study on Facebook, a systematic quantitative content analysis of legacy media websites, and a review of published reports from other authors. We show how positive sentiment towards cannabis law reform in the traditional media was amplified via referendum campaigners' activity on Facebook. While campaign expenses on both sides were similar, money was spent in different ways and via different mediums. The pro-legalisation campaign focused more on new digital media channels, while the anti-legalisation campaign diversified across a range of mediums, with greater attention paid to traditional political advertising strategies, such as leaflets and billboards. The New Zealand case study illustrates how greater engagement with the "newer" media logics may not necessarily secure a favourable outcome during a national referendum campaign. We discuss how the broader media and political environment may have influenced campaigners' choices to engage (or not) with the different media channels.

Keywords
cannabis advocacy; hybrid media; marijuana legalisation; New Zealand; Meta; political advocacy; referendum

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Digital media has become a powerful political advocacy tool in recent years. Some commentators applaud the ways in which social media has reshaped power relations in contemporary politics and helped grassroot organisations exert influence (Loader, 1997; Loader & Mercea, 2012). Others see the new digital forums as destructive forces with the potential to undermine democracy, emphasising concerns about "fake news" and the polarisation of public debates (Flinders, 2013). A more moderate view proposes that digital media has not fundamentally transformed contemporary politics but simply introduced a new channel of influence. According to this view, technology *per se* does not cause change, but it may be leveraged, to different degrees, by political actors who "adapt" their strategies to harness digital media opportunities (Jungherr et al., 2020).

In this vein, scholars have challenged the dichotomous distinction between "old" (traditional) and "new" (digital) media, proposing that the contemporary political media system is "hybrid" in nature; it involves a range of media and networks of political actors who are intricately connected and shaped by both "older" and "newer" media logics at the same time (Chadwick, 2018). For example, in his book *Hybrid Media Systems:*

Politics and Power, Chadwick (2018) challenges the view that Obama's 2008 election campaign gave rise to a new digital politics paradigm. Instead, he demonstrates how Obama's digital strategy was carefully coordinated with traditional rallies and appearances on television guided by the "older media" logic. Similarly, the involvement of Cambridge Analytica consultancy in the 2016 US presidential campaigns of Donald Trump and Ted Cruz has been heralded as the dawn of a new digital politics era, sparking research into Facebook algorithms and psychological targeting of voters. However, some studies have questioned this narrative (e.g., Anstead et al., 2018), with some commentators arguing that fears around the psychometric targeting of voters were exaggerated (Jungherr et al., 2020).

The role of interconnected hybrid media environments in contemporary politics has been the focus of extensive electoral campaign research, as illustrated by the US examples above, while less attention has been paid to campaigns across "older" and "newer" media channels during public referenda. The 2016 Brexit referendum is perhaps the most analysed referendum campaign in the hybrid media environment. Campaigners utilised both traditional media strategies and new digital media tools, including social media bots, mass data-harvesting, and the sharing of traditional "legacy" media content on social media channels (Bastos & Mercea, 2017; Brändle et al., 2022). Analyses of the Brexit referendum have revealed how a hybrid media system facilitated both top-down and bottom-up political mobilisation, demonstrating the importance of the hybrid media landscape and elite political influence during public referenda (Brändle et al., 2022).

Although referenda are similar to election campaigns in many ways (e.g., they leverage similar channels to influence the public), they involve distinct policy questions, processes, and stakeholders, including the prominent role of grassroots interest organisations and non-partisan political messages (Langer et al., 2019). Referendum scholars have long argued that referendum voting often exhibits greater volatility than party elections, particularly if political parties are internally divided on an issue (Leduc, 2002). There are significant gaps in our understanding of how non-party political actors mobilise during referenda, and how hybrid media have changed the dynamics of public debates and campaigns during direct democracy votes. It also remains open to debate whether campaigning in the hybrid media environment and incorporation of social media into political communication strategies truly benefit grassroots organisations.

This article contributes to the understanding of political actors' strategic use of hybrid media systems during a national referendum on a controversial public policy issue through an in-depth case study of the 2020 cannabis legalisation referendum in New Zealand. We draw on an intensive digital ethnographic study of campaigning in the three months leading up to the referendum vote, alongside quantitative content and sentiment analysis of digital news media websites (i.e., the digital channels of mainstream "legacy" media), a review of the campaigns' post-referendum spending reports, and a review of other published studies and reports of media reporting during the referendum. Using this multi-source investigation, we analyse how campaigners on both sides of the debate strategically utilised the hybrid media environment, including through their engagement with paid advertising on social media and by leveraging their digital networks. We also explore the wider media and political environment to understand factors that may have influenced campaigners' strategic decisions to engage (or not) with the different media channels.

2. Theoretical Framework: Hybrid Media System and the Politics of Referenda Campaigns

The "hybridity" of contemporary political communication system means that a diverse set of political actors use multiple communication channels to influence the public debate. The interactions between political actors, media, and the public are interdependent, complex, and ever-evolving (Chadwick, 2018). While "newer" digital media channels, such as social networking sites, provide political actors with nimble and cost-effective ways of directly promoting certain information to the public, their strength also lies in the opening of opportunities for engagement by non-elite political activism (Chadwick, 2018), a feature particularly relevant for non-party grassroots interest organisations that often play an important role during national referenda (Buchanan, 2016). In turn, the arrival of "newer" digital media logic has also changed how "older" mainstream media operate, as they increasingly integrate information from the online realm into their own practices, thus providing space for non-elite actors to enter the news production process. Simultaneously, traditional media journalists and editors continue to act as "gatekeepers" to political information (White, 1950) in their role as creators and selectors of information, illustrating the continued relevance of "older" media logic. In this vein, mainstream media continues to play an important role by "framing" events (Entman, 1993) and promoting positive, neutral, or negative understanding of phenomena (Coleman et al., 2009). In turn, political actors and citizens can contribute to the shape of public debates by leveraging mainstream media coverage and increasing the visibility of mainstream news in digital spaces through sharing mainstream media content online (the so-called "secondary gatekeeping effect"; Singer, 2014).

Taken together, these changes in the political communication landscape have altered the ways actors can strategically mobilise to influence public debates. According to Chadwick (2018, p. 4), the hybrid media system rewards actors who strategically "steer information flows in ways that suit their goals and in ways that modify,

enable, or disable others' agency." Empirical research into political party campaigns demonstrates how integrating older and newer communication channels has now become a recognised feature of professional political campaigning during elections (Lilleker et al., 2015; Mykkänen et al., 2016) and also non-electoral periods (Ícaro & Lilleker, 2020). Similarly, in a national referendum context, a successful campaign will leverage the "older" and "newer" media logics recognising the interdependence of actors and mediums. However, by virtue of the different media logics—defined by Chadwick (2018, p. 4) as "technologies, genres, norms, behaviours and organisational forms"—some political communication channels are more amenable to actors' strategic activities than others. For example, mainstream media reports and commentary can promote or alternatively hinder campaigners' preferred narratives, while paid advertising affords greater level of control over the message. Studies of electoral campaigns have empirically demonstrated how political parties choose to emphasise different issues (Elmelund-Præstekær, 2011) and adopt different strategies (Walter & Vliegenthart, 2010) across communication channels, a phenomenon partly explained by the demands of different media and the parties' ability to control the message. These issues are relevant in the context of referendum campaigns and the communication strategies of non-party actors. Indeed, Chadwick (2018, p. 286) argues that the grassroots political activism enabled by the newer digital media logic "must be set in the context of the broad and continuing power of the political and media elites." Additionally, the political advertising strategies during a referendum campaign may be at least partly dictated by the campaigners' access to financial resources (e.g., Lupia & Matsusaka, 2004), as well as the regulatory environment (e.g., maximum allowed spending limits and/or advertising rules).

While the newer digital media channels afford non-party referendum actors with nimble, innovative, and cost-effective ways of campaigning during public referenda, the success, intensity, and choice of campaigners' strategies (including the allocation of resources and level of engagement with different media) will depend on a range of "environmental" factors, including the referendum regulatory framework and mainstream media landscape. Drawing on the hybrid media theory above, we expand the study of political communication strategies during direct democracy votes by analysing how referendum campaigners strategically engaged (or not) with "older" and "newer" media logics during the New Zealand cannabis legalisation referendum.

3. Political Background, New Zealand Media System, and Key Cannabis Referendum Campaigners

New Zealand is a long-standing parliamentary democracy with legislated, albeit infrequently used, mechanisms of direct democracy. Referenda can be initiated by a citizen petition (with a minimum signature requirement of 10% of enrolled voters, and non-legally binding) or by the government (on any topic, including constitutional change; these may be legally binding if the law provides for it; Roper et al., 2020). Less than 20 public referenda have been held in New Zealand to date (excluding local votes on alcohol prohibition held in the late 19th and early 20th centuries; Te Ara Encyclopedia of New Zealand, 2020). The last pre-2020 referenda were held in 2015–2016, when the public rejected the proposal to change the design of the New Zealand flag.

The New Zealand cannabis legalisation referendum was notable as the first public vote on this issue to be held at the national level (in contrast to cannabis legalisation ballots in US states; Ballotpedia, n.d.-a, n.d.-b), and because it involved public voting on a detailed legislative bill (the Cannabis Legalisation and Control Bill) rather than a broad question about whether cannabis should be legal or not (Wilkins & Rychert, 2021). New Zealand has traditionally followed a conservative prohibition-based approach to drug policy, with no adoption of cannabis decriminalisation, and hence the proposal was viewed as controversial. The referendum was held on 17 October 2020, together with the general election. The referendum proposal was narrowly rejected, with 48.4% voting in support and 50.7% against (0.8% spoiled unusable votes).

The role of legacy and social media during the cannabis referendum has been controversial. After the announcement of the referendum result, some commentators suggested that the information space was dominated by the anti-reform campaign (Hutton, 2020; Mckenzie-Mclean, 2020), though published analyses of traditional media reports and one study of social media discourse on Twitter do not support this view (Dempster & Norris, 2022; Riordan et al., 2020; Rychert et al., 2022). For context, New Zealanders' trust in traditional news sources has declined in recent years, with government funding of news production being one of the key reasons cited (Myllylahti & Treadwell, 2022). A recent study expanding Hallin and Mancini's seminal typology of media systems identified New Zealand's public media system as a mixed "liberal-pluralist" model, which is characterised by comparatively moderate levels of less secure funding, weaker regulatory protections, and smaller audience shares (Neff & Pickard, 2021).

During the New Zealand cannabis referendum debate, the government adopted a neutral stance, leaving the ground open for lobbying by various non-party interest actors. The government's "signposting" public information campaign merely aimed to direct voters to official resources about technical aspects of the proposed reform and referendum process, rather than promote voting in support of cannabis legalisation (Roper et al., 2020). This self-imposed neutral stance reflected the different views on cannabis legalisation among the governing coalition partners and within the respective parties. The proposal to hold a referendum first emerged during the 2017 coalition negotiations between

Labour and the Green Party, with the latter being a long-time advocate for cannabis law reform. In contrast to the proactive, pro-legalisation campaigning by the Green Party spokesperson for drug reform (MP Chlöe Swarbrick), the highly popular Prime Minister Jacinda Ardern (the leader of the NZ Labour Party) decided not to reveal her stance on this issue, explaining that she did not want to influence voters (Rychert & Wilkins, 2021).

Referendum campaigners generally operate in a regulated environment. Under New Zealand electoral and referendum advertising rules, campaigners who intended to spend more than NZ$13,600 (US$9,700) in the two-month period prior to the voting date were required to register with the electoral commission, and those spending over NZ$100,000 in this period were required to submit a mandatory budget report. Additionally, electoral commission rules specified that each registered campaigner could spend a maximum of NZ$338,000 (US$240,000) during the two months prior to the referendum vote (Electoral Commission New Zealand, 2020b). Of the 15 registered cannabis referendum campaigners, only two lobbied for a vote against legalisation (Electoral Commission New Zealand, 2020a). Key campaigners for a "yes" vote included the New Zealand Drug Foundation (a well-known charity that advocates for drug policy reform) and Make It Legal, an ad-hoc grassroots campaign rallying pro-cannabis legalisation activists and supporters. The leading anti-reform campaign, Say Nope to Dope, was coordinated by the Smart Approaches to Marijuana Coalition, a group linked to Family First, a long-standing organisation promoting conservative values in New Zealand (Family First was itself a registered referendum campaigner lobbying against the reform). In addition to the key registered campaigners, many other actors became involved in the public debate, including politicians, celebrities, academics, the New Zealand Medical Association, and other civil society actors.

4. Methods

The analysis draws on our digital ethnographic research of the referendum campaigns on Facebook, systematic quantitative content analysis of traditional legacy media during the referendum debate, a review of post-referendum reports on campaigners' budget expenses, and a synthesis of other published research on the cannabis referendum debate in New Zealand. The key components of the original research involved quantitative content analysis of media articles and commentary published on the websites of leading New Zealand digital news providers (i.e., the digital channels of "mainstream" legacy media) and unobtrusive digital ethnography observations of registered referendum campaigner accounts on Facebook, complemented with quantitative analysis of their social media activity, in the three-month pre-referendum period. Details of the methods are described below.

Firstly, we conducted daily visits to the six leading mainstream digital news websites in New Zealand—i.e., *NZHerald*, *Stuff*, *The Spinoff*, *Newshub* (TV3), *One News* (TV1), and *Otago Daily Times*, each visited once a day in the afternoon, i.e., between 6 and 9 pm, from 31 July to 17 October—recording all articles about cannabis and the cannabis referendum (including article placement on the news website and instances of republished stories). The recorded articles were subsequently coded by sentiment (i.e., pro-legalisation, anti-legalisation, neutral) and actors used as sources of information/opinion. The dataset comprised 245 unique articles (486 publication instances due to articles being published multiple times on the website and/or on consecutive days). Two researchers independently conducted sentiment coding of the entire legacy media sample (Cohen's Kappa coefficient: 0.85), using a five-point coding scale: −2 = *strongly opposing legalisation*, −1 = *moderately opposing*, 0 = *neutral*, +1 = *moderately supportive*, and +2 = *strongly supportive*. The coding protocol and scale benchmarks were discussed and agreed upon during the preliminary coding of a sub-sample of 20 articles. Sentiment coding involved consideration of the overall "slant" of the article, with attention to the title, a picture illustrating the story, accompanying video, balance in sources, word choice, and inclusion or omission of information (e.g., only one side of the argument presented). Disagreements were resolved through a score by a third independent coder. The average sentiment score for all unique articles was calculated by dividing the total sentiment count by 245 (i.e., the number of unique media items).

Secondly, we conducted a digital ethnography of campaigner accounts by following registered referendum campaigners on Facebook, taking written memos during daily observations of digital campaigns in the three-month pre-referendum period. Our digital ethnography approach involved unobtrusive observations of campaigners' activity (i.e., the researcher as a "lurker"; see Murthy, 2008; Uberti, 2021). This was complemented by systematic recording and coding of campaigners' advertising activity and the sharing of legacy media content on the campaigners' Facebook accounts. Systematically coded indicators included the posting and promotion of traditional legacy media content by campaigners, spending on paid promotion advertising, and the patterns of sharing content between campaigners. We utilised "political and social issues" advertisement data on Facebook to track campaigners' weekly advertising spending. We focused on Facebook as it is by far the most widely used social networking site in New Zealand (We Are Social & Hootsuite, 2020) and is the third most-accessed channel for news consumption (after broadcast news and digital news outlets; McVeagh, 2016).

Descriptive findings from the research have been previously reported, alongside a comprehensive description of the research methodology and coding procedures (Rychert et al., 2022). In this article, we contextualise

the broader academic and theoretical implications of this analysis to describe how actors on both sides of the debate utilised the opportunities presented by the new hybrid media environment. We discuss how and to what extent campaigners incorporated social media into their strategies and how the "older" mainstream media practices and regulatory environment may have impacted their campaign choices.

The article is structured in three parts. Firstly, we outline features of the referendum debate in the digital channels of traditional legacy media, focusing on the sentiments (i.e., neutral, pro-, and anti-legalisation) and the actors who were featured most frequently in these articles. Secondly, we discuss how referendum campaigners strategically engaged with the hybrid media logics, focusing on the sharing of traditional legacy media content on Facebook, paid promotion of that content, and other strategies for leveraging online social networks to influence the public. Thirdly, we compare the expenditures of anti- and pro-reform campaigns using official post-referendum reports and analyse the different levels of attention the respective campaigners paid to advertise via different media. Finally, we discuss the implications of the case study for wider media and referendum theory.

5. Findings

5.1. Referendum Debates in the Legacy Media: Sentiments and Actors in the Mainstream Media Debates

Of the total of 245 unique articles published by the six leading digital news providers, most (48%) were neutral in sentiment towards legalisation, with 42% supportive of legalisation and 10% opposed to reform. We found that the *average* sentiment of legacy media articles was mildly supportive of legalisation, i.e., 0.4 sentiment score (on a scale of −2 = *strongly opposing legalisation* to +2 = *strongly supportive*; Rychert et al., 2022). Legacy media articles with pro-reform sentiments were, on average, republished more often on legacy media websites than those with negative sentiments (Rychert et al., 2022). These results are broadly consistent with other published reports on media coverage during the referendum. For example, one small-scale study (N = 37 articles) found the majority of articles on the digital website of the leading national newspaper (the *NZHerald*; i.e., 54%) had a balanced or neutral tone, 43% were "explicitly for legalisation," and only one article was "explicitly against legalisation" (Dempster & Norris, 2022). Similarly, a post-referendum analysis commissioned by the anti-legalisation conservative campaigner Family First found that a neutral tone dominated news headlines (46%), followed by pro-legalisation news headlines (36%) and a minority (18%) that were anti-reform (N = 203; Family First, 2021).

In terms of stakeholders driving the debate in traditional legacy media, the pro-reform actors featured significantly more often than the anti-reform campaigners, with frequent appearances by pro-reform politicians and civil society actors. Overall, we found that politicians featured prominently as subjects and sources of information (23% of unique articles in the dataset, n = 56), followed by NGO and civil society campaigners (22%, n = 54) and academics (21%, n = 50; Rychert et al., 2022). Secondary analysis conducted for this article found that politicians supporting cannabis legalisation (i.e., primarily the Green MP Swarbrick and former Prime Minister Helen Clark) featured in the media more often (11% of unique articles in the dataset) than politicians with a neutral stance towards the reform (8% of articles) and politicians opposing legalisation (i.e., opposition MPs and minority coalition partners; 7%). Similarly, pro-reform NGO actors featured more than twice as often (16% of articles) as anti-reform campaigners (7%) in the articles we analysed. The latter result concurs with findings in a report commissioned by the anti-legalisation campaigner, which found that advocates for a "yes" vote were quoted twice as often as those advocating for a "no" vote (Family First, 2021).

In summary, sentiment in the legacy media towards cannabis law reform was mostly neutral, with a mild skew towards pro-legalisation reporting and commentary. This suggests legacy media largely endeavoured to provide balanced reporting in line with the norms of legacy journalism. However, the pro-reform actors, particularly politicians and civil society organisations, featured in media reports more often than the anti-legalisation actors. There could be many reasons for this, from the ideological and political leanings of editorial teams to the fact that pro-reform campaigners simply outnumbered the anti-reform campaigners or made themselves more available to media enquiries. The frequent featuring of "yes" campaigners supports both the "top-down" (pro-reform political elite) and "bottom-up" (civil society and grassroots organisations) mechanisms of mobilisation in the legacy media. While our analysis of media sentiments and actors helps understand the mainstream media environment in which campaigners operated, it does not reveal actors' strategies to engage (or not) with "newer" and "older" media. As we show in the next section, the pro-reform referendum actors appeared to leverage their social media networks to influence the legacy media content to a greater extent.

5.2. Leveraging the Hybrid Media System: Campaigners' Strategic Uses of Facebook

The hybrid theory of contemporary media implies that traditional "older" media logics are intertwined with "newer" online media tools, and vice versa. During the New Zealand cannabis legalisation referendum, this hybrid media landscape manifested in several ways: the sharing and promoting of traditional "legacy" media content online, the use of social media content in journalists' reports (see, for example, Cheng, 2020), and

finally the leveraging of referendum stakeholders' networks in social media to influence the narrative in the traditional media. The latter was evidenced during our digital ethnographic research; for example, when a pro-reform advocate posted on Facebook that they were "helping a TV news show" to find heroes for a media story and requesting volunteers to come forward (Figure 1). This illustrates one way that referendum actors leveraged their digital social networks to influence information environments in the hybrid media world. Of note, a study of pre-referendum debate on Twitter, a platform known to attract political and media elites, also found that New Zealand tweets had mostly positive sentiments towards legalisation (Riordan et al., 2020).

Figure 1. A civil society organisation lobbying for greater access to medicinal cannabis shares a post by a high-profile cannabis legalisation supporter looking for cannabis market participants for a traditional media story.

The frequent sharing of "legacy" media content in social media was a notable feature of the campaign. Using the Crowdtangle plug-in for Chrome internet browser, we determined that nearly all articles captured during the daily monitoring of six leading "legacy" media outlets were shared on Facebook (i.e., 96%, n = 236; Rychert et al., 2022). Overall, articles with pro-legalisation sentiment had disproportionally higher average interaction rates (i.e., shares, likes, and comments) on Facebook than those with negative sentiment (i.e., mean 1,129 interactions for pro-reform articles vs 771 for anti-reform), suggesting more prominent engagement with the "newer" digital media logics by pro-legalisation stakeholders, or perhaps more receptive audience engagement with their messaging on Facebook. A review of the high-profile shares revealed that one in four articles from the dataset were shared by a *registered* referendum campaigner. Other shares were by media outlets themselves, non-registered campaigners (e.g., legal medicinal cannabis companies, smaller NGOs), key individuals, and political actors (for an illustrative network map of how posts about cannabis were shared between those accounts, see Rychert et al., 2022). These interactions across stakeholders and media illustrate what Chadwick and colleagues (2015, p. 14) call "campaign assemblages" comprised of diverse "multiple, loosely coupled individuals, groups, sites, and media technologies" that work together towards a desired campaign outcome (Chadwick et al., 2015).

The steering of information flows in desired directions sometimes involved individuals outside the narrow campaign networks. For example, when a seemingly unrelated press release about a new dangerous synthetic drug discovered on the New Zealand illegal drug market was issued in late September (a month before the voting day; Science Media Centre, 2020), subsequent news headlines and academic expert commentary focused on how cannabis legalisation could reduce demand for synthetic drugs, supporting the case for reform (e.g., "Cannabis referendum," 2020). As such, the original press release warning drug users of a new dangerous substance progressed into a pro-reform elite commentary. One headline on the website of a national broadcaster quoted a celebrity media presenter who had previously expressed an anti-legalisation stance and was now considering changing his vote in view of this new development ("Duncan Garner," 2020). A couple of news items from this information cycle, one quoting an independent academic researcher and another with the above celebrity, were subsequently used by pro-reform campaigners in paid advertising campaigns on Facebook (see Facebook Ad Library 2020a, 2020b). This illustrates how grassroots activists and civil society were able to capitalise on the positive elite commentary in legacy media.

Indeed, in order to leverage the reach of traditional "legacy" media content on Facebook, the pro-legalisation campaigners used paid advertising to promote mainstream media articles more widely. Using Facebook database, we estimated that the three major pro-legalisation pages (i.e., Make it Legal, NZ Drug Foundation, and NZ Norml) spent between 5 to 20% of their total Facebook advertising budget promoting links to digital media, including news sites and blogs (Rychert et al., 2022). An example of such promotion is provided in Figure 2. In contrast, the anti-legalisation campaigners, while also sharing "legacy" media content on their Facebook channels, did not actively promote any news articles through paid advertising. Instead, their paid Facebook advertising campaign consisted exclusively of custom-designed campaign messages (see an example in Figure 3). This illustrates how anti-legalisation campaigners took a more conventional approach with paid promotion online, whereas the pro-legalisation campaigners made fuller use of social media platforms and the hybrid media landscape by repurposing traditional media content in their online advertising. Of note, both pro- and anti-legalisation campaigners utilised some audience targeting based on age, location, and gender, illustrating how campaigners "narrowcasted" specific messages to different segments of the social media audience (see detailed examples of targeted advertising in Rychert et al., 2022).

Figure 2. Example of a news article originally published on the digital channel of a TV broadcaster, shared and promoted via paid advertising by a registered referendum campaigner.

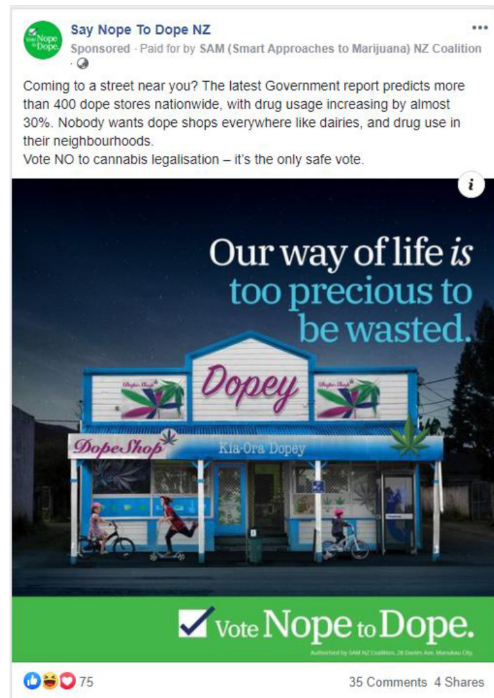

Figure 3. Example of anti-legalisation campaigner advertisement on Facebook.

5.3. Referendum Campaign Budgets and Advertising Expenditures in "Newer" and "Older" Media Channels

Although the results of empirical studies on the impact of campaign spending on public referenda remain inconclusive (i.e., some studies have found campaign spending *against* a ballot more effective than spending *in favour*, while other recent analyses argue that spending is similarly effective for both sides; see De Figueiredo et al., 2011; Garrett & Gerber, 2001; Jaquet et al., 2022; Lupia & Matsusaka, 2004), the size of campaigners' budgets does matter. As might be expected, the higher a campaigner's budget, the more resources and power they have to influence voters, including through advertising (Broder, 2001; De Figueiredo et al., 2011; Matsusaka, 2004). In New Zealand, referendum advertising was controlled by rules about disclosure (i.e., register of campaigners and mandatory post-referendum reports by those who spent more than NZ$100,000 in the two-month pre-referendum period) and maximum spending limits (i.e., maximum NZ$338,000 spending in the regulated period).

Some post-referendum commentary claimed that the anti-legalisation campaign was better funded (Mckenzie-Mclean, 2020), influencing the result. While it is difficult to estimate campaign budgets precisely (i.e., only *registered* campaigners who spent more than NZ$100,000 were required to file a report to the electoral commission), the available data suggests the campaign budgets of the two camps were not significantly different, i.e., two anti-legalisation campaigners declared cumulatively spending NZ$461,500, and two major pro-legalisation campaigners declared NZ$442,000 (Electoral Commission New Zealand, 2021). Overall, the two leading campaigners on both sides came close to the maximum spending limit allowed by the regulations. There is no official data on spending by the other pro-legalisation campaigners who fell below the mandatory reporting threshold. What is evident from the available data is that pro-legalisation campaigners, and particularly one group (Make It Legal), spent more money on advertising in social media, whereas anti-legalisation campaigners diversified their spending across different mediums, including traditional political advertising strategies such as pamphlets, sponsored articles in print newspapers, and public billboards (Table 1).

The more traditional approach to referendum advertising was evident in the way some of the sponsored content was used in the anti-legalisation campaigners' online communications (e.g., via sharing a photograph of a physical newspaper with a sponsored print article; see Figure 4). The posting of a photo with a physical print newspaper advertorial may have been a strategic or unintentional way of capitalising on the prestige of print media and "traditional" media brands. In the words of the anti-legalisation campaigner, they were motivated to pay for the sponsored newspaper content because of a perceived "lack of balanced reporting" in the mainstream media. Post-referendum expenditure reports show that the major pro-reform campaigner

Table 1. Referendum campaign spending by the top four campaigners.

Two months (16 August–October)	Pro-legalisation		Anti-legalisation	
	NZ Drug Foundation	Make It Legal	Smart Approaches to Marijuana Coalition	Family First
Total declared spending (NZ$)	$337,242	$104,781	$320,300	$141,224
	$442,023		$461,524	
Leading expenses	• Advertising ($214,000), including TV broadcast advertising (approx. $132,000), Facebook and Instagram advertising (approx. $25,000), Google ads (approx. $12,000), and print magazine advertising (at least $11,500) • Production of TV, digital, print ads, and social media content (creative agency): Approx. $80,400 • Flier and poster printing and distribution: Approx. $9,000	• Facebook advertising and social media content creation: Approx. $103,000	• Multi-channel advertising package: Approx. $81,000 • Newspaper advertising: Approx. $69,000 • Television advertising: Approx. $34,000 • Creative agency fees: Approx. $28,000 • Facebook advertising: Approx. $31,000 • Billboards: Approx. $17,000	• Pamphlet printing, translations (Samoan, Tongan, Korean, Māori, Arabic) and courier/delivery: Approx. $130,000

Source: Electoral Commission New Zealand (2021).

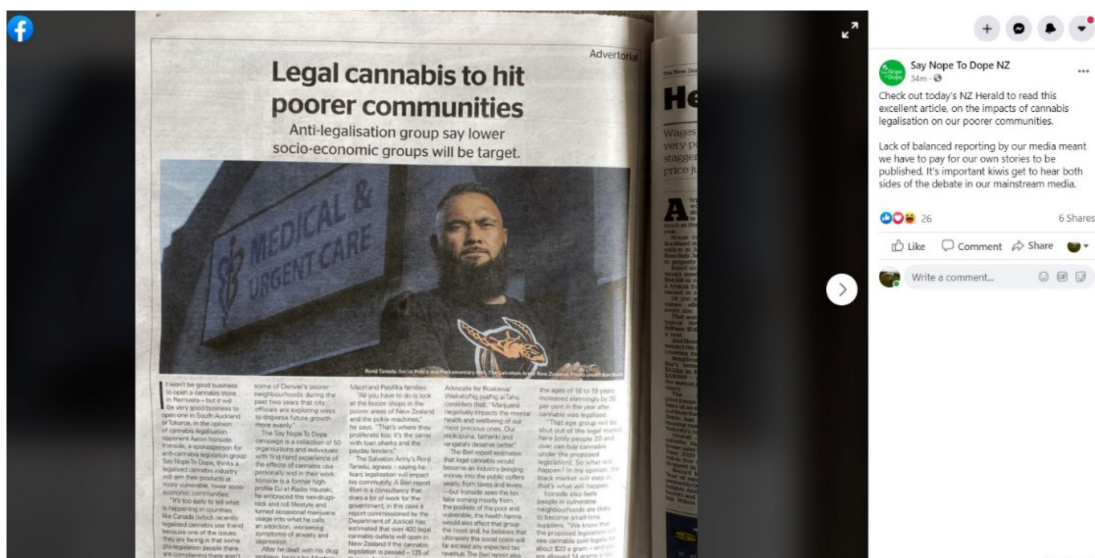

Figure 4. Sponsored article in a national newspaper, shared by the anti-legalisation Facebook campaigner account. Note: Facebook post reads, "Lack of balanced reporting by our media meant we have to pay for our own stories to be published. It's important that kiwis get to hear both sides of the debate in our mainstream media."

(NZ Drug Foundation) also engaged in print advertising, although to a lesser extent (Table 1).

6. Discussion

This study of a referendum on a highly controversial policy issue contributes to the understanding of political communication strategies in the hybrid media environment during direct democracy voting by investigating *how* campaigners strategically engaged (or not) with the “older” and “newer” media and exploring *why* they may have taken their respective approaches. We found that pro-cannabis legalisation campaigners engaged with the “newer” digital media logics to a greater extent than the anti-legalisation campaigners. This included leveraging their social media networks to influence the debate in traditional legacy media, the greater sharing of pro-legalisation posts on Facebook (including content from legacy media), and paid advertising on social media. The sentiment and actor analysis of mainstream media and review of post-referendum spending reports provided important *context* for understanding campaigners’ strategic choices within the wider media and the regulatory and political environment in which they operated. Campaigners’ strategic choices were shaped by the factors they perceived they were able to control. For example, the “gatekeeping” function of traditional media combined with the anti-reform campaign perception of media bias during the debate (see Figure 4) may have reinforced the decision to invest resources in traditional political advertising such as billboards and household leafleting rather than attempt to influence mainstream journalists and elite commentary through *tactical* use of the internet (see Chadwick, 2018, p. 288). On the other hand, the pro-reform campaigners appeared to skilfully enter the news production cycle to influence legacy press and television coverage through timely interventions, and this tactic may have been reinforced with the positive feedback loop, as evidenced in their more frequent appearances in the legacy media.

In terms of mainstream media reports and commentary, we found that while the pro-reform stakeholders appeared in the traditional media more frequently, overall, the majority of articles were neutral towards legalisation, followed by those with a mild pro-legalisation sentiment. This suggests that, in general, traditional mainstream media largely endeavoured to provide a balanced overview of the issue. However, this was outlet dependent. For example, we previously reported that the *One News* website, a digital channel of the Crown-owned television station, provided the most balanced overview of the issues (Rychert et al., 2022). This could reflect the national broadcaster’s commitment to the principles of balanced journalism characteristic of the pre-internet era, or, as noted in the introduction, the Government’s self-imposed neutral stance on the issue. As other political communication academics have previously argued, the traditional mainstream media still matters (Langer & Gruber, 2020), and even in these times of hybrid media systems, the traditional media continue to enjoy prestige, loyalty, and trust among the mainstream public. The anti- and pro-reform campaigners’ expenditures on advertising in newspapers and television (see Table 1), along with the pro-legalisation campaign efforts to influence mainstream media reports, as well as promote the traditional news in their online campaigns (e.g., Figure 2), illustrate that both sides of the debate displayed awareness of the continued power of the older media.

Interestingly, this reliance on the prestige of legacy media and the adoption of more “traditional” political campaigning was evident even in the social media content of the anti-legalisation campaign, despite their perceived challenges in influencing mainstream media. The posting of a photo with the sponsored newspaper article is a notable example of this. Additionally, all paid advertising content on Facebook by the anti-legalisation campaign included the same layout with a characteristic green banner and the campaigner logo, reflecting the more conventional, traditional top-down “command and control” campaign model (in contrast to the more diverse campaign of pro-legalisation NGOs and grassroots organisations, characterised by decentralised and bottom-up influences). The latter may reflect the challenges of coordinating a referendum campaign across traditional and new digital media channels, particularly when conducted by a loosely connected network of activists.

The analysis of post-referendum expenditure reports shows the financial resources of the pro-reform and anti-reform camps were not significantly dissimilar, with the two leading campaigners spending close to the maximum regulated pre-referendum budget. While the financial “constraints” on campaigns were similar, money was spent in different ways and in different mediums. This was particularly evidenced in the stark contrast between the advertising strategy of the pro-reform Make It Legal campaign, which spent nearly all available budget on social media Facebook advertising, compared to the anti-reform campaigner Family First, who spent most of their funds on leaflet printing and drop-offs to households (Table 1). Ultimately, the high campaign spending on Facebook by one of the two major pro-legalisation actors (i.e., Make It Legal) may have been a strategic mistake (i.e., missing the undecided demographic of older voters). Although Facebook has good coverage of a cross-section of the New Zealand population (estimated 70% coverage), younger users aged 25–34 dominate the platform (i.e., 25% of New Zealand accounts), followed by users aged 18–24 (17.4%; NapoleonCat, 2021; We Are Social & Hootsuite, 2020). This comparatively young user cohort may have already been supportive of cannabis legalisation, making campaigners’ promotion on Facebook less efficient. Indeed, pre-referendum polls and analyses of voter intentions found that younger people were much more likely to vote in favour of legalisation (e.g., Vowles, 2020). In contrast, the anti-legalisation campaign diversified efforts across a range of mediums,

and their greater focus on traditional advertising and via leaflet drops may have reached a wider cross-section of the population who were likely to vote.

Finally, it is important to reflect on the campaigners' respective positions as "challenger" (vote "yes" campaign) or "status quo" actor (vote "no" campaign) in the referendum debates as this may have also affected the respective campaign styles. The *status quo bias* phenomenon suggests that voters faced with uncertainty about the likely effects of policy change tend to vote against the proposal (Bowler & Donovan, 1998; Kahneman et al., 1991). Currently, scientific uncertainty remains about the long-term social, public health, and safety impacts of cannabis legalisation (Decorte et al., 2020). In this environment, even the "neutral" mainstream media posts that drew attention to gaps in knowledge and unknown consequences may have ultimately favoured the anti-reform argument.

7. Limitations and Outlook

The analysis drew on an in-depth investigation of six mainstream legacy media channels and campaigners' activity on Facebook, alongside other published reports and studies. We did not systematically analyse televised broadcast news or print newspapers. Instead, we made inferences about campaigners' activity in those channels from their mandatory post-referendum reports, alongside our non-structured observations as expert stakeholders. The analysis of mainstream media covered four digital news providers with the highest unique visitor numbers (Nielsen, 2018) and the websites of two major television news broadcasters. Websites of other news outlets with lower unique visitor numbers were not included in the analysis, meaning no digital channels of radio stations were included. We took a number of steps to ensure careful operationalisation of media sentiment coding (e.g., involvement of three independent coders); however, subjective influences cannot be completely eliminated. In terms of social media analysis, we focused on Facebook, reflecting its strategic importance for campaigners and the fact that referendum-related social media advertising mostly occurred on this platform. We relied on digital ethnography observations and analysis of posts and advertising data made available by Facebook. This approach did not involve scrutinising Facebook algorithms, which are another important factor determining campaigners' power in the hybrid media environment. Although much more difficult to decipher, even for the referendum campaigners themselves, the way algorithms decide who gets to see certain posts make Facebook another important "gatekeeper" to public opinion. Our analysis did not involve an evaluation of the accuracy or persuasiveness of the statements promoted by the respective campaigners. It may be that some messages resonated with the public more widely than others. As noted above, given the still unfolding consequences of cannabis legalisation overseas, it is not easy to determine the accuracy of statements regarding reform consequences. Finally, we did not empirically analyse the impact of campaigners' political advertising strategies on voters, or how the mainstream media content influenced their decisions.

The study provides a detailed account and analysis of the recent New Zealand cannabis legalisation referendum. The findings progress understanding of referendum campaigners' strategic choices regarding older and newer media channels and how their choices may be shaped by the wider media and regulatory environment. By analysing both older and newer media channels, we provide comparative insights on the referendum debates across media channels and demonstrate the relevance of hybrid media theory in the study of referendum campaigns. The findings also have methodological implications for future referendum campaign research—i.e., the need to clearly define referendum campaign channel(s) and consider possible biases in narrowly-cast studies—and campaign strategies to achieve change through a referendum in regard to controversial topics.

Acknowledgments

The study was funded by the Massey University Strategic Research Excellence Fund.

Conflict of Interests

The authors provided unpaid advice to the New Zealand Ministry of Justice with regard to the development of the Cannabis Legalisation and Control Bill and provided unpaid presentations of scientific evidence concerning cannabis law reform to media and community groups. The authors did not collaborate with any advocacy groups or political actors campaigning in the referendum and undertook to maintain a neutral position.

References

Anstead, N., Magalhães, J., Stupart, R., & Tambini, D. (2018). *Political advertising on Facebook: The case of the 2017 United Kingdom general election*. Semantic Scholar. https://www.semanticscholar.org/paper/Political-Advertising-on-Facebook-%3A-The-Case-of-the-Anstead-Magalh%C3%A3es/f42374ed6138b0fd258d7b2fff7099f9f9700c93

Ballotpedia. (n.d.-a). *Marijuana laws and ballot measures in the United States*. https://ballotpedia.org/History_of_marijuana_on_the_ballot

Ballotpedia. (n.d.-b). *Marijuana on the ballot*. https://ballotpedia.org/Marijuana_on_the_ballot

Bastos, M. T., & Mercea, D. (2017). The Brexit botnet and user-generated hyperpartisan news. *Social Science Computer Review*, *37*(1), 38–54.

Bowler, S., & Donovan, T. (1998). *Demanding choices: Opinion, voting, and direct democracy*. University of Michigan Press.

Brändle, V. K., Galpin, C., & Trenz, H.-J. (2022). Brexit as "politics of division": Social media campaigning after the referendum. *Social Movement Studies*, *21*(1/2), 234–253.

Broder, D. S. (2001). *Democracy derailed: Initiative campaigns and the power of money*. Harcourt.

Buchanan, M. (2016). "Liked," "shared," re-tweeted: The referendum campaign on social media. In N. Blain, D. Hutchison, & G. Hassan (Eds.), *Scotland's referendum and the media: National and international perspectives* (pp. 70–82). Edinburgh University Press.

Cannabis referendum: Liberal drugs laws will reduce demand for "zombie" drug AMB-FUBINACA—Expert. (2020, September 23). *Newshub*. https://www.newshub.co.nz/home/new-zealand/2020/09/cannabis-referendum-liberal-drugs-laws-will-reduce-demand-for-zombie-drug-amb-fubinaca-expert.html

Chadwick, A. (2018). *The hybrid media system: Politics and power* (2nd ed.). Oxford University Press.

Chadwick, A., Dennis, J., & Smith, A. P. (2015). Politics in the age of hybrid media: Power, systems, and media logics. In A. Bruns, G. Enli, E. Skogerbo, A. Larsson, & C. Christensen (Eds.), *The Routledge companion to social media and politics* (pp. 7–22). Routledge.

Cheng, D. (2020, September 7). Kiwibank shuts down "green fairy" bank account a year after giving her "local hero" medal. *NZHerald*. https://www.nzherald.co.nz/nz/kiwibank-shuts-down-green-fairy-bank-account-a-year-after-giving-her-local-hero-medal/JWB7TH65WE26XWU5W7OL3FY3HU

Coleman, R., McCombs, M., Shaw, D., & Weaver, D. (2009). Agenda setting. In K. Wahl-Jorgensen & T. Hanitzsch (Eds.), *The handbook of journalism studies* (pp. 147–160). Routledge.

Decorte, T., Lenton, S., & Wilkins, C. (Eds.). (2020). *Legalizing cannabis: Experiences, lessons and scenarios*. Routledge.

De Figueiredo, J. M., Ji, C. H., & Kousser, T. (2011). Financing direct democracy: Revisiting the research on campaign spending and citizen initiatives. *The Journal of Law, Economics, & Organization*, *27*(3), 485–514.

Dempster, C., & Norris, A. N. (2022). The 2020 cannabis referendum: Māori voter support, racialized policing, and the criminal justice system. *Decolonization of Criminology and Justice*, *4*(1), 57–80.

Duncan Garner: Why I'm considering changing my vote to "yes" at the cannabis referendum. (2020, September 23). *Newshub*. https://www.newshub.co.nz/home/politics/2020/09/duncan-garner-why-i-m-considering-changing-my-vote-to-yes-at-the-cannabis-referendum.html

Electoral Commission New Zealand. (2020a). *Third party handbook: General elections and referendums 2020*. https://elections.nz/assets/Handbooks/Third-Party-Hanbook-2020-August.pdf

Electoral Commission New Zealand. (2020b). *Register of promoters for the 2020 general election and referendums*. https://elections.nz/guidance-and-rules/for-third-party-promoters/register-of-promoters-for-the-2020-general-election-and-referendums-2

Electoral Commission New Zealand. (2021). *Registered promoter expenses for the 2020 general election*. https://elections.nz/democracy-in-nz/historical-events/2020-general-election-and-referendums/registered-promoter-expenses-for-the-2020-general-election

Elmelund-Præstekær, C. (2011). Mapping parties' issue agenda in different channels of campaign communication: A wild goose chase? *Javnost—The Public*, *18*(1), 37–51.

Entman, R. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, *43*(4), 51–58.

Facebook Ad Library. (2020a). *NZ Drug Foundation: Paid ad promoting TV3 broadcast clip "Duncan Garner is voting yes"*. https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&view_all_page_id=116389691735819&search_type=page&media_type=all

Facebook Ad Library. (2020b). *NZ NORML: Paid ad promoting* Newshub *article "Liberal drugs laws will reduce demand for 'zombie' drug AMB-FUBINACA—Expert."* https://www.facebook.com/ads/library/?active_status=all&ad_type=all&country=ALL&view_all_page_id=161350197211948&search_type=page&media_type=all

Family First. (2021). *Media analysis: New Zealand cannabis referendum 2020*. https://familyfirst.org.nz/wp-content/uploads/2021/01/CANNABIS-MEDIA-ANALYSIS-REPORT.pdf

Flinders, M. (2013). *Defending politics: Why democracy matters in the 21st century*. Oxford University Press.

Garrett, E., & Gerber, E. R. (2001). Money in the initiative and referendum process: Evidence of its effects and prospects for reform. In M. D. Waters (Ed.), *The battle over citizen lawmaking* (pp. 73–96). Carolina Academic Press.

Hutton, F. (2020, October 31). Cannabis: "Lukewarm" govt left gap for fake news. *Newsroom*. https://www.newsroom.co.nz/ideasroom/cannabis-lukewarm-govt-left-gap-for-fake-news

Ícaro, J., & Lilleker, D. G. (2020). Permanent campaigning: A meta-analysis and framework for measurement. *Journal of Political Marketing*. Advance online publication. https://doi.org/10.1080/15377857.2020.1832015

Jaquet, J. M., Sciarini, P., & Gava, R. (2022). Can't buy me votes? Campaign spending and the outcome of direct democratic votes. *West European Politics*, *45*(2), 335–359.

Jungherr, A., Rivero, G., & Gayo-Avello, D. (2020). *Retooling politics: How digital media are shaping democracy*. Cambridge University Press.

Kahneman, D., Knetsch, J. L., & Thaler, R. H. (1991). Anomalies: The endowment effect, loss aversion, and

status quo bias. *The Journal of Economic Perspectives*, *5*(1), 193–206.

Langer, A. I., Comerford, M., & McNulty, D. (2019). Online allies and tricky freelancers: Understanding the differences in the role of social media in the campaigns for the Scottish independence referendum. *Political Studies*, *67*(4), 834–854.

Langer, A. I., & Gruber, J. B. (2020). Political agenda setting in the hybrid media system: Why legacy media still matter a great deal. *The International Journal of Press/Politics*, *26*(2), 313–340.

Leduc, L. (2002). Opinion change and voting behaviour in referendums. *European Journal of Political Research*, *41*(6), 711–732.

Lilleker, D. G., Tenscher, J., & Štětka, V. (2015). Towards hypermedia campaigning? Perceptions of new media's importance for campaigning by party strategists in comparative perspective. *Information, Communication & Society*, *18*(7), 747–765.

Loader, B. (1997). *The governance of cyberspace: Politics, technology and global restructuring*. Psychology Press.

Loader, B., & Mercea, D. (2012). *Social media and democracy: Innovations in participatory politics*. Routledge.

Lupia, A., & Matsusaka, J. G. (2004). Direct democracy: New approaches. *Annual Review of Political Science*, *7*(1), 463–482.

Matsusaka, J. G. (2004). Initiative and referendum. In C. K. Rowley & F. Schneider (Eds.), *The encyclopedia of public choice* (pp. 624–628). Springer.

Mckenzie-Mclean, J. (2020, November 1). Did misinformation sway cannabis referendum votes? *Stuff*. https://www.stuff.co.nz/national/cannabis-referendum/123239460/did-misinformation-sway-cannabis-referendum-votes

McVeagh, R. (2016). *Fairfax/NZME: Review of the draft determination*. NERA Economic Consulting. https://comcom.govt.nz/__data/assets/pdf_file/0028/77608/NERA-review-of-the-Draft-Determination-25-November-2016.PDF

Murthy, D. (2008). Digital ethnography: An examination of the use of new technologies for social research. *Sociology*, *42*(5), 837–855.

Mykkänen, J., Walter, A. S., Findor, A., Jalali, C., & Róka, J. (2016). The professionals speak: Practitioners' perspectives on professional election campaigning. *European Journal of Communication*, *31*(2), 95–119.

Myllylahti, M., & Treadwell, G. (2022). *Trust in news in Aotearoa New Zealand 2022*. AUT Research Centre for Journalism, Media and Democracy. https://www.jmadresearch.com/trustin-news-in-new-zealand

NapoleonCat. (2021). *Social media users in New Zealand at the end of 2020*. https://napoleoncat.com/stats/social-media-users-in-new_zealand/2020

Neff, T., & Pickard, V. (2021). Funding democracy: Public media and democratic health in 33 countries. *The International Journal of Press/Politics*. Advance online publication. https://doi.org/10.1177/19401612211060255

Nielsen. (2018). *New Zealand's top local news sites: July 2018 rankings*. https://www.nielsen.com/nz/en/press-releases/2018/new-zealands-top-local-news-sites-july-2018-rankings

Riordan, B., Raubenheimer, J., Ward, R., Merrill, J., Winter, T., & Scarf, D. (2020). Monitoring the sentiment of cannabis-related tweets in the lead up to New Zealand's cannabis referendum. *Drug and Alcohol Review*, *40*(5), 835–841.

Roper, J., Hurst, B., & Bethune, G. (2020). Referendums and referendum campaigns. In P. Harris, A. Bitonti, C. S. Fleisher, & A. Skorkjær Binderkrantz (Eds.), *The Palgrave encyclopedia of interest groups, lobbying and public affairs* (pp. 1–8). Springer.

Rychert, M., & Wilkins, C. (2021). Why did New Zealand's referendum to legalise recreational cannabis fail? *Drug and Alcohol Review*, *40*(6), 877–881.

Rychert, M., Wilkins, C., van der Sanden, R., & Prasad, J. (2022). Exploring digital news, advocacy networks and social media campaigns "for" and "against" cannabis legalisation during New Zealand's cannabis legalisation referendum. *Drugs: Education, Prevention and Policy*. Advance online publication. https://doi.org/10.1080/09687637.2022.2090897

Science Media Centre. (2020). *Deadly synthetic cannabis drug returns to NZ—Expert reaction*. https://www.sciencemediacentre.co.nz/2020/09/22/deadly-synthetic-cannabis-drug-returns-to-nz-expert-reaction

Singer, J. B. (2014). User-generated visibility: Secondary gatekeeping in a shared media space. *New Media & Society*, *16*(1), 55–73. https://doi.org/10.1177/1461444813477833

Te Ara Encyclopedia of New Zealand. (2020). *Referendums*. https://teara.govt.nz/en/referendums

Uberti, F. (2021). Navigating internet-mediated ethnography for socio-legal researchers. *Journal of Law and Society*, *48*(S1), S88–S103.

Vowles, J. (2020, November 17). The numbers suggest the campaign for cannabis reform in NZ will outlive the generations that voted against it. *The Conversation*. https://theconversation.com/the-numbers-suggest-the-campaign-for-cannabis-reform-in-nz-will-outlive-the-generations-that-voted-against-it-150073

Walter, A. S., & Vliegenthart, R. (2010). Negative campaigning across different communication channels: Different ball games? *The International Journal of Press/Politics*, *15*(4), 441–461.

We Are Social, & Hootsuite. (2020). *Digital 2020: New Zealand*. https://datareportal.com/reports/digital-2020-new-zealand

White, D. M. (1950). The "gate keeper": A case study in the selection of news. *Journalism Quarterly*, *27*(4), 383–390.

Wilkins, C., & Rychert, M. (2021). Assessing New Zealand's cannabis legalization and control bill: Prospects and challenges. *Addiction*, *116*(2), 222–230.

About the Authors

Marta Rychert (PhD) is a senior researcher at the SHORE & Whāriki Research Centre, Massey University, New Zealand. Her research lies at the intersection of health, public policy, and the law, with a particular interest in drug policy, harm minimisation, and cannabis law reform. She serves as the co-editor-in-chief of the international journal *Drugs, Habits and Social Policy*. Prior to her academic appointments, she worked as a journalist.

Chris Wilkins is an associate professor at Massey University and has research expertise in drug policy, illegal drug markets, and drug trends. Over the past 20 years, he has completed a range of studies on drug use in New Zealand with a particular focus on cannabis, methamphetamine, ecstasy, organised crime, and illegal drug markets. He has published numerous journal articles and contributed to three books, including recently co-editing a book on cannabis legalisation (*Legalizing Cannabis: Experiences, Lessons and Scenarios*, with Professors Tom Decorte and Simon Lenton).

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 69–80
https://doi.org/10.17645/mac.v11i1.6200

Article

Beyond Brexit? Public Participation in Decision-Making on Campaign Data During and After Referendum Campaigns

Julia Rone

Minderoo Centre for Technology and Democracy, University of Cambridge, UK; jr803@cam.ac.uk

Submitted: 8 September 2022 | Accepted: 22 December 2022 | Published: 31 January 2023

Abstract
While the Brexit referendum campaign has been extensively researched, media, regulatory bodies, and academics have often talked at cross-purposes. A strong focus on Cambridge Analytica's role in the 2016 referendum, despite official investigations concluding the company had only limited involvement in the campaign, has distracted attention from more mundane but highly controversial data practices, including selling voters' data to third parties or re-using campaign data without consent from data subjects. This empirical case study of data-driven referendum campaigning around Brexit raises two broader theoretical questions: First, moving beyond the current focus on transparency and accountability, can public participation in the ownership and management of campaign data address some of the problematic data practices outlined? Second, most academic literature on data-driven campaigning, in general, and referendum campaigns, in particular, has often overlooked the key question of what happens with campaigning data once campaigns are over. What legal safeguards or mechanisms of accountability and participation are there to guarantee consent when it comes to further re-use of people's data gathered during campaigns? Ultimately, the article raises the question of who should have a say in how "people's data" is used in referendum campaigns and afterwards and makes a case for democratising such decisions.

Keywords
Brexit; data-driven campaigning; digital democracy; participation; referendums; referendum campaigns

Issue
This article is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This article is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

Data-driven campaigning has been the focus of public and academic attention already since the 2008 Obama campaign and even earlier (Stromer-Galley, 2019). Most existing research so far, however, has focused on election campaigns (Anstead, 2017; Bennett & Lyon, 2019; Chadwick & Stromer-Galley, 2016; Howard, 2005; Kefford et al., 2022; Montigny et al., 2019; Stromer-Galley, 2019), while referendum campaigns have been generally overlooked (see Udris & Eisenegger, 2023). Probably the one big exception from this common trend has been the highly prominent 2016 Brexit referendum campaign on whether the UK should leave the European Union. The Brexit referendum resulted in a surprising victory for Leave, leading to a protracted political crisis with multiple overlapping conflicts of sovereignty in the UK. Cadwalladr's (2017) explosive investigations on connections between the Leave campaigns and the controversial firm Cambridge Analytica sparked a broad media debate on the role of psychological profiling and targeted advertising online. Within the UK, the number of articles discussing Cambridge Analytica skyrocketed, with almost 10,000 pieces mentioning Cambridge Analytica in 2018, before attention to the topic starkly declined in the following years (see Figure 1).

In the aftermath of the 2016 referendum, several official investigations into Brexit campaigning started collecting information on a wide range of issues such as the use of data analytics in political campaigning, funding irregularities, foreign interference, disinformation, and fake news. Academic research also explored the use of social media in Brexit-related campaigning (Brändle et al., 2022; Hänska & Bauchowitz, 2017), the broader impacts

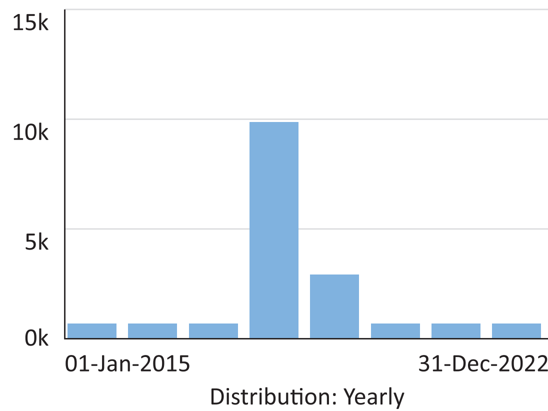

Figure 1. Mentions of "Cambridge Analytica" in UK media featured in the Factiva database. Source: Factiva (2023).

of data analytics use on democracy (Risso, 2018), as well as what types of regulations and oversight of data-driven campaigning would be needed (Dommett, 2020; Margetts & Dommett, 2020).

Despite the fact the Brexit referendum campaign has been so well and extensively researched, media, regulatory bodies, and academics have sometimes talked at cross-purposes, with little cross-pollination between their different perspectives and findings. Thus, even though the UK's Information Commissioner's Office (ICO) report on the use of data analytics in political campaigns established already in 2018 (on the basis of analysis of 42 computers, 700 terabytes of data, 31 servers, and more than 300,000 documents as part of their investigation) that Cambridge Analytica did *not* directly misuse data of UK voters to influence the Brexit referendum, references to the data practices of Cambridge Analytica as related to the Brexit referendum are still made in academic articles on Brexit (Brändle et al., 2022; Markussen, 2022; Ortega Martín & Sánchez Berrocal, 2022).

Furthermore, there has been an extensive research focus on the campaigns in the lead-up to the referendum, but we know almost nothing about post-referendum campaigns such as the People's Vote, which campaigned for a second referendum. The few academic articles that have explored these campaigns or related online activity (Brändle et al., 2018, 2022; Rone, 2022) focus on issues such as citizenship, polarisation, and the instrumentalisation of sovereignty but have little to say about the data practices of these campaigns. This is a significant gap in the literature: The campaign for People's Vote that unfolded in the aftermath of the 2016 referendum, for example, was one of the most significant campaigning efforts in the UK, responsible for two of the biggest marches in the country since 2000, comparable only with the march against the Iraq War in 2003.

Considering these two points, the current article offers a case study of the data practices of Brexit-related referendum campaigns with a special focus on who had a say in how citizen data was managed within these campaigns. I use this specific case study to raise two broader theoretical points that open directions for research on other referendum campaigns as well. First, following original research that has dispelled the myths of digital campaigning (Anstead, 2018; Baldwin-Philippi, 2017; Kefford et al., 2022; Simon, 2019), I argue that despite overblown fears about psychological profiling and individualised targeted advertising, some of the most problematic occurrences in terms of data management actually resulted from bad organisational practices and the concentration of power in the hands of unelected businessmen. In both pro- and anti-Brexit campaigns, the people ended up being "spectators in their democracy" (Edelman, 1988, as cited in Stromer-Galley, 2019, p. 18) with no control over how their data was collected, managed, and sometimes misused. At the same time, attempts to address such problems through regulatory means have focused on improving transparency above all (regardless of how detailed demands for transparency are; Dommett, 2020), but have rarely even considered the possibility of democratic public participation in campaign data ownership and management.

Following the classic definition by Smith (1983, as cited in Rowe Frewer, 2000, p. 6), public participation is understood in this article as "encompassing a group of procedures designed to consult, involve, and inform the public to allow those affected by a decision to have an input into that decision." There has been a rise in interest in public participation since it can fulfil a number of purposes, including:

> Fulfilling legal requirements; embodying the ideals of democratic participation and inclusion; advancing social justice; informing the public; enhancing understanding of public problems and exploring and generating potential solutions; and producing policies, plans and projects of higher quality in terms of their content. (Quick & Bryson, 2016, p. 160)

Furthermore, public participation is also "an important end unto itself in a democratic society" (Quick & Bryson, 2016, p. 160), often fostering citizens' appreciation for and experience in democratic procedures through their involvement in participatory practices. Overlooking

participation when it comes to the ownership and governance of campaign data has narrowed down not only the range of possible solutions, but also the very interpretation of problems involved as related, above all, to fairness, accountability, and transparency rather than as problems of democracy as well.

Second, the literature on data-driven campaigning has often overlooked the key question of what happens with collected data once campaigns are over. What legal safeguards or mechanisms of accountability and participation are there in place to guarantee consent when it comes to further re-use of people's data gathered during campaigns? Posing this issue and acknowledging the complex after-life of data is an important first step to reasserting control and ensuring public consent over data usage beyond the stages of initial collection and campaigning.

The article is based on a qualitative thematic analysis of key official policy reports on the Brexit campaigning, including the 2018 ICO investigation into the use of data analytics in political campaigns and the 2019 Digital, Culture, Media and Sport Committee (DCMSC) parliamentary report on fake news and disinformation. I complemented these official policy sources with relevant media articles (identified through a combination of searching for the campaign names in Google, e.g., "Leave.EU," "Britain Stronger in Europe," "Leave Means Leave," "People's Vote," and snowballing from relevant articles) covering the internal politics and data use of pro-Brexit and anti-Brexit campaigns, as well as interviews with Richard Tice (associated with the Leave.EU and Leave Means Leave campaigns) and Tom Baldwin (communications director of the People's Vote campaign) from the UK in Changing Europe Brexit Witness Archive, and finally the books *The Bad Boys of Brexit* (on the Leave.EU Campaign, based on Aaron Banks' diary and emails on the 2016 referendum campaign) and *Unleashing Demons* (on the Britain Stronger in Europe campaign, written by Craig Oliver, David Cameron's director of communications). My goal was to triangulate these different types of sources on both pro-Brexit and anti-Brexit campaigns and to unearth different practices of data-driven campaigning. I did a thematic analysis (Braun & Clarke, 2006) of these sources, focusing specifically on two key themes that emerged from the sources: (a) Who owned citizens' data?; and (b) who had influence on how citizens' data was managed and used? In choosing these two topics to explore in Brexit-related referendum campaigning, I hope to enrich academic scholarship on the Brexit referendum, but also to open avenues for future thinking about the data practices of referendum campaigns, more generally.

2. Grounding Data-Driven Campaigning: Dangers, Myths, and the Role of Context

While the use of digital media for campaigning has been the focus of academic research already since the 1990s (Howard, 2005; Stromer-Galley, 2019), what has changed over the last decade has been the advent of "computational politics," comprising six intertwined dynamics, namely:

> The rise of big data, the shift away from demographics to individualized targeting, the opacity and power of computational modelling, the use of persuasive behavioural science, digital media enabling dynamic real-time experimentation, and the growth of new power brokers who own the data or social media environments. (Tufekci, 2014)

This complex assemblage of practices that includes micro-targeting but goes beyond it has been also referred to in the literature as "data-driven campaigning" (Anstead, 2017) or "data-driven elections" (Bennett & Lyon, 2019). As Bennett and Lyon (2019, pp. 10–11) emphasise, "data-driven elections" is a broad concept that includes the collection of voters' data, the performance of voter analytics, and, at a later stage, political micro-targeting. Their larger point is that:

> These are all essentially surveillance practices. The data are being collected, analysed and used powerfully to influence certain populations: to convince them to vote, or not to vote; to persuade of the merits of one candidate, or the faults of an opposing candidate. (Bennett & Lyon, 2019, p. 11)

In this article, I have chosen to use the term "data-driven campaigning" to emphasise not only the computational aspect of novel data practices but also questions of data collection, management, and re-use.

The rise of data-driven campaigning has led to a substantial body of academic research drawing attention to the dangers associated with it. In their comprehensive overview of the literature on promises and threats of online micro-targeting, Borgesius et al. (2018) identified threats to citizens, political parties, and public opinion more generally. To begin with, citizens' "privacy could be invaded, and they could be manipulated or ignored" (Borgesius et al., 2018, p. 87). Crucially, political parties could present themselves as one issue parties to different citizens (Borgesius et al., 2018). And because of micro-targeting, voters could falsely assume that an issue was of primary importance to the party, while in fact, it was not. Furthermore, micro-targeting can be very expensive; thus it might consolidate the power of bigger parties at the expense of smaller ones, while also empowering new intermediaries such as social network platforms (Borgesius et al., 2018, p. 88). Microtargeting could also lead to a general fragmentation of public debate, with voters losing interest in overarching issues and focusing only on the issues that are of interest to them (Borgesius et al., 2018, p. 89). Emphasising deeper shifts in thinking and action, Ulbricht (2020) has also argued that the rise of data-driven campaigning has changed political epistemologies, leading to practices

such as "demos-scraping" where "increasing political participation" is defined as extracting consumer data rather than encouraging citizens to act politically in a conscious and intentional way.

On the other hand, several scholars have challenged the dystopias of data-driven campaigning by arguing that the importance and effects of using big data, psychological profiling, and micro-targeting in digital campaigns have been vastly oversold. Exploring the online self-presentation of the political data analytics industry, Simon (2019) argues that mass media reporting has uncritically accepted the marketing claims of data analysts who intentionally create an air of omnipotence and mystery behind their "highly scientific" methods—Indeed, the science behind the services they offer plays the role of a token, a fetish for attracting clients (Simon, 2019). And, in her analysis of the 2016 Trump and Clinton campaigns in the US, Baldwin-Philippi (2017, p. 631) argues that most fears related to micro-targeting are concerns of:

> Theoretical impact rather than actual impact, with recent studies showing the following: the "micro" part of targeting is no more effective than using public records, and we not are stuck in filter bubbles; instead audiences duplicate and overlap frequently.

Most recently, an empirical study of data-driven campaigning in six-advanced democracies has shown that rather than causing a full-fledged disruption, data-driven campaigning has adapted to pre-existing campaigning techniques and is in practice much less sophisticated than what dystopian texts on democratic decline assume (Kefford et al., 2022).

Regardless of where they stand in their normative judgements, most researchers so far have agreed that data-driven campaigning does not unfold in the same way in different countries but is strongly determined by pre-existing legal regulations, political norms, and institutional set-ups (Anstead, 2017, 2018; Bennett & Lyon, 2019). Countries with laxer data protection laws, such as the US, Canada, or Australia (Kefford et al., 2022; Montigny et al., 2019), make much heavier use of data-driven campaigning, as compared to countries with stronger data-protection regulations, such as Germany, for example (Kruschinski & Haller, 2017). Also, in the UK, legal constraints and the low availability of useful voters' data have been pointed out by different political parties as important obstacles to data-driven campaigning (Anstead, 2017).

To be sure, most of the research discussed in this section has focused above all on election campaigns, while there has been only limited attention to referendum campaigns, not to mention questions of data sharing between political parties and third actors (Rowbottom, 2020) across elections and referendum campaigns. In what follows, I hope to fill in this gap by focusing on data-driven referendum campaigning around Brexit.

3. Connections Between the Leave Campaigns and Cambridge Analytica: Beyond the Media Hype

Journalistic reports from 2017 and 2018, among which Carole Cadwalladr's highly visible investigative journalism for *The Guardian* (Cadwalladr, 2017; Cadwalladr & Townsend, 2018), sparked a salient public debate about the involvement of Cambridge Analytica in the Brexit referendum campaign. Cambridge Analytica was in fact the trading name of SCLE Elections Ltd. and the responsibilities of the companies often overlapped. Both were subsidiaries of SCLE Group ([SCL] Information Commissioner's Office, 2018, p. 8). There were two main points to the scandal: (a) Cambridge Analytica representatives had done data analytics work for the unofficial Leave.EU campaign; (b) the Canadian firm AggregateIQ (AIQ), closely related to Cambridge Analytica, had done data analytics for the official Vote Leave campaign as well as other Leave campaigns such as BeLeave and Veterans for Brexit. The initial journalistic reports, together with testimonies for the official investigations of the campaign, prompted a lot of academic research on the consequences of micro-targeting for political campaigns, often lumping together the election of Donald Trump and Brexit. Still, the results of the official investigations in the UK on both aspects of the scandal outlined above produced results quite different from what media reporting would have led us to expect.

Regarding the first point—Cambridge Analytica providing data analytics to the unofficial Leave.EU campaign—suspicions were very well founded. In his book *Bad Boys of Brexit*, Arron Banks (2017, p. 84), co-founder of Leave.EU, explicitly stated:

> We've hired Cambridge Analytica, an American company that uses "big data and advanced psychographics" to influence people….With this information, you can tailor campaign material to particular groups to vote. It may sound a bit creepy, but these days it's how most big political parties work.

Cambridge Analytica appeared at a Leave.EU press conference in November 2015. Yet, *The Bad Boys of Brexit* does not mention the company again after the press conference. Is this a strategic silence? The answer seems to be less nefarious. Banks later claimed:

> Leave.EU did not receive any data or work from Cambridge Analytica. UKIP did give Cambridge Analytica some of its data and Cambridge Analytica did some analysis of this. But it was not used in the Brexit campaign. Cambridge Analytica tried to make me pay for that work but I refused. (Hern, 2019)

According to journalistic information, Banks paid UKIP for the data, but the money was never passed on to Cambridge Analytica (Hern, 2019). The ICO investigation into the use of data analytics states: "Based on our

enquiries, testimony and interviews, we conclude that this is indeed the case—there is no evidence of a working relationship between CA and Leave.EU proceeding beyond this initial phase" (ICO, 2018, p. 44). In 2020, the ICO closed the case after checking further evidence and re-iterated that Cambridge Analytica was *not* involved in the Brexit referendum ("Cambridge Analytica 'not involved,'" 2020).

What about the connections between the official Leave campaign Vote Leave and Cambridge Analytica? Cambridge University employee Dr. Kogan and his company Global Science Research had illegally harvested the data of more than 80 million people worldwide, without their knowledge, and later shared a subset of this data with other organisations, including Cambridge Analytica (ICO, 2018, p. 39). Of these 80 million people, at least one million were UK citizens (ICO, 2018, p. 39). Did Cambridge Analytica share this data with Vote Leave? The way this could have happened was indirectly through the company AIQ. Whistle-blower Chris Wylie argued that AIQ and Cambridge Analytica were basically the same thing (Cadwalladr & Townsend, 2018). And AIQ was paid about £3.5 million by pro-Brexit campaign organisations, of which £2.7 million came from the official campaign Vote Leave and £675,000 from BeLeave (Baraniuk, 2018). Still, the ICO (2018, p. 42) investigation concluded that:

> The relationship between AIQ and SCLE was a contractual one; AIQ supplied services as outlined above for work on US campaigns….To date, we have no evidence that SCLE and CA [Cambridge Analytica] were involved in any data analytics work with the EU referendum campaigns.

The DCMSC parliamentary report on fake news and disinformation, which was published a year later, in 2019, was more sceptical and argued that "there seems to be more to the AIQ/Cambridge Analytica/SCL relationship than is usually seen in a strictly contractual relationship" (DCMSC, 2019, Section 192). The DCMSC report inferred (but could not prove) a direct link between AIQ's work and the data scraped by Cambridge Analytica: "Data matching Dr Kogan's was found in the data used by AIQ's Leave campaign audience files. Facebook believe that this is a coincidence, or, in the words of Mike Schroepfer, CTO of Facebook, an 'effectively random chance' " (DCMSC, 2019, Section 175). Beyond this information, there has been no other evidence of sharing data between AIQ and Cambridge Analytica.

Certainly, AIQ "handled, collected, stored and shared UK citizen data, in the context of their work on the EU referendum" (DCMSC, 2019, Section 170), but considering that they were hired to do precisely this work, this is not surprising. The ICO also confirmed that AIQ had access to the personal data of UK voters, but the data was "given by the Vote Leave campaign" (ICO, 2018, p. 50), not by Cambridge Analytica. In addition, Facebook told the UK Electoral Commission in May 2018 that "AIQ had made use of data file custom audiences—enabling AIQ to reach existing customers on Facebook or to reach users on Facebook who were not existing customers—website custom audiences and lookalike audiences" (DCMSC, 2019, Section 173). All in all, it seems that AIQ counted on data provided by Vote Leave, as well as custom audiences data. Conclusive evidence about Cambridge Analytica sharing data with AIQ is missing.

Ultimately, while both Leave.EU and Vote Leave undoubtedly had some connections with Cambridge Analytica, the company did not play the key role in the Brexit referendum that it is still often assumed to have played. Nevertheless, the focus on the role of Cambridge Analytica in some digital communications academic research has distracted attention away from other more mundane, but still highly problematic, data practices that were discovered in the campaigns and had significant negative consequences for the democratic process. I outline some of these practices in the following section.

4. Selling Data, Buying Data: Political Parties (Mis)Using Party Data for the 2016 Referendum Campaigning

UKIP's cooperation with Cambridge Analytica failed in the long run. But the process was fraught with problems already at an early stage. Data of UKIP party members was shared with a third party—Arron Banks as representing the Leave.EU campaign, who passed it on to Cambridge Analytica (even if not hiring them in the end), without any public accountability by UKIP and without any opportunity for party members to exercise control over the process.

Furthermore, the misconduct Leave.EU and Arron Banks were actually fined by the ICO was much more trivial than the Cambridge Analytica suspicions and yet highly indicative. The ICO announced its intent to fine Leave.EU and Arron Banks's company Eldon Insurance each with £60,000, since more than a million Leave.EU subscribers received ads for Eldon's insurance products, without consent. Leave.EU was to be fined an extra £15,000 for sending 300,000 emails with a Leave.EU newsletter to Eldon customers (ICO, 2018, pp. 44–49). This mixing of public and private business interests and political campaigning was made possible by the fact that the Leave.EU campaign was run as a private "bad boys club" of several businessmen, (Richard Tice and Arron Banks being the most prominent) who united forces with UKIP's Nigel Farage (Banks, 2017; UK in a Changing Europe, 2020). Citizens who supported Leave.EU had their data used for advertising purposes by a private insurance company, with no knowledge or say over how their data was used.

Lack of accountability and undemocratic handling of data were problems encountered not only on the Leave side of the campaign. In 2018, the ICO report stated

that they had obtained information that the Liberal Democrats (LibDems) had sold the personal data of their party members to the Britain Stronger in Europe campaign for approximately £100,000 (ICO, 2018, p. 54). In response to the ICO's information notice, the LibDems and Open Britain (Britain Stronger in Europe changed its name after the referendum, in August 2016, to Open Britain) both argued that there was no wrongdoing and that the Remain campaign had bought electoral register information from the LibDems, enhanced by a third-party group with emails and phone numbers (ICO, 2018, pp. 54–55). This deal is even more interesting in light of the difficulty of obtaining voter data in the UK shared by political party representatives in relation to the 2015 elections, preceding the 2016 Brexit referendum campaign (Anstead, 2017)

A year later, on November 13, 2019, the progressive news outlet *Open Democracy* published a piece in which they argued that the ICO had new information on the case and was investigating further. ICO was concerned about why a simple enhancement of publicly available data would cost £100,000 (Cusick, 2019a). Once the *Open Democracy* article was published, the LibDems wrote to the media outlet to question why they had not been given the opportunity to comment. *Open Democracy* responded they had requested a comment, but the party had not replied. Two days later, the expensive legal firm Goodman Derrick sent *Open Democracy* a letter in which they required all derogatory content to be removed or the whole article taken down at the threat of legal action (Fitzgerald, 2019). After *Open Democracy* refused to comply since they had followed standard journalistic practice, an undisclosed employee from the LibDem office sent a forged email containing the supposed comment by the party.

Ultimately, a scandal ensued, and the LibDems fired a member of staff over the forged email, without providing clarity over the key question: What type of data had they sold to Britain Stronger in Europe? A follow-up investigation by Cusick (2019b) claimed that Tim Gordon, chief executive of the LibDems, supervised the data services sale and "is understood to have privately explained to colleagues that the data sale could be seen as sensitive and controversial, and so steps were taken to minimise the article trail for the deal." While it is still unclear what exact data was sold for £100,000 and how it was enhanced, not only was there no transparency on the issue but there was also no chance for LibDem party members to influence this decision. Both the Leave.EU and the Britain Stronger in Europe cases are symptomatic for the UK context, where campaigners struggled to find relevant data during the campaigns, resorting to buying political party data without consulting voters' opinions on this. Still, the most dramatic example of the clash between top-down control of data and bottom-up mobilisation could be seen in the collapse of the People's Vote campaign, which mobilised only in the aftermath of the referendum.

5. The Collapse of the People's Vote Campaign: A Four-Dimensional Chess Game?

As already mentioned above, the Britain Stronger in Europe campaign was re-launched after the 2016 referendum as Open Britain. Crucially, Open Britain kept control of the data of Britain Stronger in Europe. The chairman of the board of Open Britain was Roland Rudd, founder and head of the Finsbury public relations company, as well as the brother of conservative politician Amber Rudd. Open Britain was initially not against Brexit but mainly wanted to keep the UK in the single market. After Theresa May's poor performance at the 2017 general elections, though, activists pushed for a more resolute position, and different Remain groups united forces (Mance, 2020). This is how the People's Vote campaign started with the aim of promoting a second referendum.

At the suggestion of Alastair Campbell, former spokesman of Tony Blair, Tom Baldwin, another former Labour party adviser, joined the campaign as director of communications (UK in a Changing Europe, 2021). Baldwin and the director of Open Britain, James McGrory, tried to bring together the different Remain groups in the People's Vote campaign, an experience Baldwin described as "building an aeroplane as you are taking off; there are bits falling off and you are going very, very fast" (UK in a Changing Europe, 2021). The campaign's focus, according to Baldwin, was to get a second referendum. People's Vote became one of the most successful political campaigns in British history, organising marches for a People's Vote that were attended by hundreds of thousands of people and raising £100,000 a week in small donations (Sabbagh, 2019).

As the political crisis deepened and a second referendum started to seem increasingly probable, McGrory and Baldwin felt that the organisational structure of the People's Vote campaign was inadequate. Baldwin decried "a lot of pride and angst and placeholding from people like Roland Rudd" (UK in a Changing Europe, 2021). Frustrated with Rudd's lack of meaningful engagement and desire to appoint friends at high positions, campaign members decided to move against him (UK in a Changing Europe, 2021). In October 2019, the *Daily Mail* published an article entitled "Alastair Campbell and Peter Mandelson use dark arts to try to seize control of the second referendum campaign and topple its multimillionaire boss Roland Rudd" (Owen, 2019). The scoop was made possible because one of the plotters forwarded the email by mistake to Rudd himself (Owen, 2019).

In what ensued, Rudd moved first, took control over all the data and finances of the People's Vote campaign through his position in Open Britain, and sacked McGrory and Baldwin, thus paralysing the whole campaign. According to Rudd, the campaign was not run well enough: "We needed to do more to focus on digital and data operations, which had been hugely neglected" (Mance, 2020). The rank-and-file staff of the campaign, many of whom worked on a minimum London

living wage, walked out in protest against the decision and were threatened with legal action (Mance, 2020; Sabbagh, 2019). The campaign imploded, with staff using the campaign's Facebook and Twitter accounts to attack Rudd's coup. Ultimately, Rudd kept control over the campaign (and over all the supporters' data), even though he was forced to step down a month later due to the public controversy, leaving the position to a trusted figure (Mance, 2020).

In December 2019, the People's Vote campaign asked the Electoral Commission to investigate it over donations received during the time it was run by McGrory and Baldwin. The right-wing pro-Brexit political commentary website Guido Fawkes (2019) called this development in which the campaign itself asked to be investigated a "four-dimensional-chess move no one saw coming.'' This comment, pro-Leave bias notwithstanding, provides a good summary of the dramatic infighting in the People's Vote campaign that took place in front of the public, but with no involvement of the public. The hundreds of thousands of people who marched on the streets, the 500,000 registered supporters of the campaign who had provided their data, the staff itself—none of those participants in the People's Vote had any influence over how their data, donations, and enthusiasm would be used. The People's Vote campaign has recently re-branded itself as "Democracy Unleashed," with citizens' data treated as a valuable resource that could be reused again.

While the People's Vote was certainly digitally savvy, its use of "data-driven campaigning" was, according to both Baldwin and Rudd, not intensive. This is very much in line with Craig Oliver's book *Unleashing Demons* on the earlier Britain Stronger in Europe campaign, which mentions the word "digital" only 8 times in 408 pages (Oliver, 2017). The fact that Rudd got proof of the plot to oust him after an email was forwarded by mistake also shows that far from the highly scientific digital sophistication we expect from modern-day campaigning, most of it is still human, complicated, and messy. Again, the key data story of this campaign was the appropriation of campaign supporters' data by the head of a PR relations company. It is this type of non-democratic attitude that seamlessly merges business interests and political causes that was shared by the otherwise very different campaigns Leave.EU, Vote Leave, Britain Stronger in Europe, and People's Vote.

6. Regulatory Calls: Participation Over Time as a Missing Aspect

As official investigations of malpractices during the Brexit referendum were taking place, regulators started consultations on how to update (or even rehaul) existing regulations. A particularly relevant example for the purposes of this article is the 2019 ICO public consultation on a code of practice for using personal data in political campaigning. A number of academics also joined public debates on regulating data-driven campaigning. Margetts and Dommett (2020, pp. 747, 749–750), for example, have recommended not only "a wholesale rewriting of electoral law," but also more coordination between key regulators, platforms expanding and regularising "their efforts towards transparency" and developing "systems for accountability and over-sight," and a "public awareness campaign to enable citizens to understand and scrutinise electoral processes and be able to navigate the landscape of political information both outside and during election periods." Importantly, Rowbottom (2020) drew attention to the need to update and harmonise legislation on third-party campaigners, understood as actors different from parties and candidates. Campaigns such as the People's Vote discussed above are a good example of such type of a "third-party campaigner" that has, in many respects, fallen through the cracks of existing legislation.

Academics have also been critical of some of the recommendations of existing regulators: Dommett (2020) observed that a key recommendation of all official investigations on the Brexit referendum was to increase transparency. Such demands, however, were often too general and did not specify the "type of transparency sought, or the form transparency should take" (Dommett, 2020, p. 433). There was often little detail on whether regulators meant *funding transparency* (who funded the campaign), *source transparency* (what is the source of campaign material), *data transparency* (what data is accessed and how it is being used), or *targeting transparency* (who is being targeted and why; Dommett, 2020). It was equally unclear what exact information should be published, in what format, how it should be made legible to citizens, etc. By not defining what they mean by transparency, regulators basically allowed companies such as Facebook to decide themselves what information they should disclose as well as how easy it is to discover, process, and understand (Dommett, 2020). At the same time, Shiner (2019, p. 14) argued that the focus on a few bad players, such as corporate and foreign actors using microtargeting, overlooks the fact that "there would be no market for these techniques if politics did not invest in them." Shiner (2019, p. 13) rightly noted that:

> The more fundamental issues do not relate to closing regulatory gaps but ensuring the political ecosystem balances out more fairly and imbues democratic principles like fairness and transparency which can help futureproof legal reforms. It seems that the scandal around data misuse for political purposes has served as an illustration of the huge distance between those elected to represent and those being represented—with companies exploiting that gulf for profit.

While agreeing with the analyses and recommendations of all scholars mentioned above, this article argues first, that few of them raise the question of data-use by campaigners *after* a campaign (with the exception of Rowbottom, 2020). What happens with data after a referendum is over? For how long should data be

kept? Could it be re-used? In the cases analysed in this article, problematic data practices were associated with sharing election data with third-party referendum campaigners (UKIP and the LibDems both sold data to third parties), or with referendum campaigners continuing to use data even after a concrete campaign was over (the transformation of People's Vote to Democracy Unleashed case). As a result of the publicity around Brexit, some guidance on this issue in the UK context has been developed. The ICO's *Guidance for the Use of Personal Data in Political Campaigning*, published after the 2019 public consultation, has a special section titled "After a Campaign," which addresses questions such as "can we use personal data from one campaign to another?" Among the key considerations are "whether the personal data is necessary for future campaigns," "whether it would be in individuals' reasonable expectations that you keep the data," "what you told individuals at the point of collection," "whether the nature of future campaigns could amount to processing for a different purpose (e.g., a referendum campaign on EU membership to a local election)," "how long you have retained the data and whether it is still adequate, relevant or accurate," and "whether you are able to keep the data securely and whether keeping the data creates any unjustifiable risk of it being subject to unauthorised disclosure" (ICO Guidance, 2022, p. 73). The ICO also clearly states that if an organisation is disbanding, personal data should not be shared with other controllers unless this is done "in accordance with data protection law" (ICO Guidance, 2022, p. 74). One key problem with the ICO guidance is that it does not introduce new obligations or responsibilities but mainly establishes a code of practice, which is generally non-binding and cannot ensure compliance (Shiner, 2019, p. 18).

Furthermore, the ICO guidance leaves all decision-making to parties and data controllers as key actors. As discussed above, these actors are encouraged to be transparent so that they could be held accountable. This article's second main theoretical argument is that the focus on transparency (on the part of both regulators and academics studying them), no matter how finely defined, has overlooked the political and institutional failures of Brexit-related campaigning as related not only to data protection but also as *democratic* failures. In their study of citizens' demands for transparency in European trade policy, Gheyle and de Ville (2017) argued that the European Commission has interpreted calls for transparency as calls for more information, but what activists actually demanded was more participation. Focusing on public participation might help address the gap between politicians and their electorate that Shiner (2019) rightly identifies as a core problem traversing the ecosystem of political communication. And it is precisely this focus on participation that has been notoriously absent from most discussions on the data practices of Brexit-related campaigns, in particular, but also of data-driven campaigning, more generally.

To be sure, there have been substantial critiques of the model of data protection embodied in the European Union's General Data Protection Regulation (GDPR), for example, which is widely held as a high standard for data protection. The GDPR has placed too much weight on transparency, accountability, and fairness as mechanisms of protecting rights understood above all as individual rights. Authors have argued instead for the need for systemic regulation or thinking about rights as collective, especially considering that often the harms addressed are of collective character (Cobbe, 2021; Mayer-Schonberger, 2010). Furthermore, as research on voter attitudes to data-driven campaigning in Australia has shown (Kefford, 2021), a significant number of voters have felt highly uncomfortable with political parties acquiring information about them from financial entities, companies they buy things from, or social media platforms. Such feelings of discomfort could hardly be assuaged by more transparency but would require a fundamental change of practice.

Including the public in decision-making over what type of data should be collected on them, for how long and whom it should be shared with could be a good way to guarantee public trust in elections as a foundational element of democratic systems. Indeed, as Rowe and Frewer (2000, p. 5) note, among the chief reasons for the rise in interest in public participation in technical policy matters are "a recognition of basic human rights regarding democracy and procedural justice," but also the "practical recognition that implementing unpopular policies may result in widespread protest and reduced trust in governing bodies." Extending this argument further, one could argue for ensuring mechanisms of ownership and management of voters' data that give more power to individuals or collective bodies of voters. Referenda, public inquiries, surveys, negotiated rulemaking, citizens' jury panels, advisory committees, and focus groups have all been experimented with to foster public participation. Each of these participatory practices comes with its own benefits and problems (Rowe & Frewer, 2000, pp. 8–9). Furthermore, party members, for example, could vote on how their own party should manage their data. Alternatively, there could be voters' data governance bodies (the same way we have authors' rights representative bodies) that allow their members to decide what uses of their data they agree with in the context of political campaigning. Recent years have seen the rise of innovative research on alternative regimes of data ownership and governance, placing emphasis on collective data ownership and/or giving more power to individuals vis-à-vis private companies (Fischli, 2022; Mills, 2019; Mukhametov, 2021; Muldoon, 2022; Singh & Vipra, 2019). But such innovative research has rarely focused on data used in political campaigns by political parties or third-party actors, not to mention cases in which political campaigns obtain and merge voter data from public registries and private corporations. While not aiming to resolve these questions, this article has the

more modest ambition of raising them, especially in light of the analysis of the Brexit referendum campaign.

Of course, participation is not a panacea. Four important objections could be raised to the proposal for more public participation in decision-making on campaign data. First of all, even completely bottom-up democratic movements such as the Spanish Indignados witnessed a lot of misuse of data, internal quarrels, trolling, and appropriation of citizens' information (Rone, 2019). Second, a focus on voters' participation in decision-making over their own data would be a substantial departure from current legally established mechanisms of accountability in key documents such as GDPR. While there have been critics arguing that "data protection doesn't work" (Cobbe, 2021), novel proposals with alternatives to the current data protection regime are still scarce. Third, the concept of participation is not less ambiguous or imprecise than transparency, for example. In his seminal text "Too Much Democracy in All the Wrong Places," Kelty (2017, pp. 86–87) has emphasised how participation has been interpreted in multiple ways depending on changing historical contexts:

> Participation is always aspirational. One might say it wavers back and forth between two moods: optative and critical. In the optative mood, it signals an enthusiasm, a normativity, a happy hypothesis of change through the involvement of more people rather than fewer, poorer rather than richer, rural rather than urban, indigenous rather than colonial, or everyday experience rather than rarefied expertise. But in a critical mood, what is called participation becomes a false claimant: phony participation. By accusing participation of being false, phony, exploitative, or disappointed, it allows the optative mood in the next turn of phrase—a better, more authentic participation yet to come.

Participation thus presents itself as much as a challenge as a solution. More recently, we have seen rising concerns over "participation washing" in relation to technology design (Sloane et al., 2020). Finally, even if all these concerns can be addressed, it remains far from certain political parties would support changes to campaigning that facilitate voter participation in decision-making over the use of their data. As Bennett (2022) has shown in the Canadian context, political parties have acted as a cartel to prevent even basic data privacy legislation extending to them. There is every reason to believe political parties in various national contexts would resist more changes that encourage participation and give more power and voice to voters to decide how their data would be used in election campaigns.

7. Conclusion

To conclude, beyond dramatic tales of disinformation and micro-targeting, Brexit-related data-driven campaigning was marked by several problematic undemocratic practices of sharing data with third parties and reusing data without any consent or input from the public. Despite the use of crowd-funding and active citizen involvement, neither the ownership of data nor its management were democratic in any sense of the word. The "people's data" was the domain not of people but of parties doing deals with campaigns run by businessmen.

Questionable data practices are a symptom of a broader lack of accountability and participation in increasingly professionalised campaigning in the UK, very different from bottom-up protest movements observed during the 2010s protest wave in Europe (Rone, 2022). Still, demands for citizen democratic participation in data ownership and governance (both during and after campaigns) are not a panacea. Such demands open all kinds of additional challenges that need to be carefully thought through and addressed. What this analysis has aimed to show is simply that, so far, citizen participation in data ownership and governance has remained a non-issue in both debates on Brexit-related campaigning and beyond. Yet, increasing participation might be an important way to address current malpractices in data-driven campaigning that involve not only a few bad actors but the political ecosystem as a whole.

Acknowledgments

I would like to thank the anonymous reviewers of this article for all their constructive comments and suggestions, including pointing out the importance of what happens to data in the aftermath of campaigns. Thanks also for all the useful comments that I received during the Open Lab Session, organised by the Minderoo Centre for Technology and Democracy, where I presented a draft version of this article.

Conflict of Interests

The author declares no conflict of interests.

References

Anstead, N. (2017). Data-driven campaigning in the 2015 United Kingdom general election. *The International Journal of Press/Politics*, *22*(3), 294–313.

Anstead, N. (2018). Data and election campaigning. *Political Insight*, *9*(2), 32–35. https://doi.org/10.1177/2041905818779333

Baldwin-Philippi, J. (2017). The myths of data-driven campaigning. *Political Communication*, *34*(4), 627–633.

Banks, A. (2017). *The bad boys of Brexit: Tales of mischief, mayhem & guerilla warfare in the EU referendum campaign*. Biteback Publishing.

Baraniuk, C. (2018, September 20). Vote Leave data firm hit with first ever GDPR notice. *BBC*. https://www.bbc.com/news/technology-45589004

Cambridge Analytica "not involved" in Brexit referen-

dum, says watchdog. (2020, October 7). *BBC*. https://www.bbc.com/news/uk-politics-54457407

Bennett, C. (2022, March 31–April 1). *Privacy, profiling and federal political parties: The extent and limits of the "party cartel"* [Paper presentation]. Les Défis de la Démocratie des Données, Laval, Canada.

Bennett, C. J., & Lyon, D. (2019). Data-driven elections: Implications and challenges for democratic societies. *Internet Policy Review*, *8*(4). https://doi.org/10.14763/2019.4.1433

Borgesius, Z. 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.

Brändle, V. K., Galpin, C., & Trenz, H.-J. (2018). Marching for Europe? Enacting European citizenship as justice during Brexit. *Citizenship Studies*, *22*(8), 810–828.

Brändle, V. K., Galpin, C., & Trenz, H.-J. (2022). Brexit as "politics of division": Social media campaigning after the referendum. *Social Movement Studies*, *21*(1/2), 234–253.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *3*(2), 77–101.

Cadwalladr, C. (2017, May 7). The great British Brexit robbery: How our democracy was hijacked. *The Guardian*. https://www.theguardian.com/technology/2017/may/07/the-great-british-brexit-robbery-hijacked-democracy

Cadwalladr, C., & Townsend, M. (2018, March 24). Revealed: The ties that bound Vote Leave's data firm to controversial Cambridge Analytica. *The Guardian*. https://www.theguardian.com/uk-news/2018/mar/24/aggregateiq-data-firm-link-raises-leave-group-questions

Chadwick, A., & Stromer-Galley, J. (2016). Digital media, power, and democracy in parties and election campaigns: Party decline or party renewal? *The International Journal of Press/Politics*, *21*(3), 283–293.

Cobbe, J. (2021, July 5). *Data protection doesn't work: Oversight failure in data processing figurations* [Paper presentation]. Minderoo Centre for Technology and Democracy Seminar, Cambridge, UK.

Cusick, J. (2019a, November 13). New evidence that LibDems sold voter data for £100,000 held back till after election. *Open Democracy*. https://www.opendemocracy.net/en/dark-money-investigations/new-evidence-that-libdems-sold-voter-data-for-100000-held-back-till-after-election

Cusick, J. (2019b, December 6). Breaking: Lib Dems admit they added information about voters in £100 k data sale. *Open Democracy*. https://www.opendemocracy.net/en/opendemocracyuk/breaking-lib-dems-admit-they-added-information-about-voters-in-100k-data-sale

Digital, Culture, Media and Sport Committee. (2019). *Disinformation and "fake news*." https://publications.parliament.uk/pa/cm201719/cmselect/cmcumeds/1791/1791.pdf

Dommett, K. (2020). Regulating digital campaigning: The need for precision in calls for transparency. *Policy and Internet*, *12*(4), 432–449.

Factiva. (2023). *Search summary: Text "Cambridge Analytica"; date "01/01/2015–31/12/2022"; region "United Kingdom"; language "English"; results found "13,989"*.

Fischli, R. (2022). Data-owning democracy: Citizen empowerment through data ownership. *European Journal of Political Theory*. Advance online publication. https://doi.org/10.1177/14748851221110316

Fitzgerald, M. (2019, December 1). What are Jo Swinson's Liberal Democrats so desperate to hide? *Open Democracy*. https://www.opendemocracy.net/en/opendemocracyuk/what-are-jo-swinsons-liberal-democrats-so-desperate-to-hide

Gheyle, N., & Ville, F. (2017). How much is enough? Explaining the continuous transparency conflict in TTIP. *Politics and Governance*, *5*(3), 16–28.

Guido Fawkes. (2019). *People's Vote campaign ask electoral commission to investigate themselves*. https://order-order.com/2019/12/06/peoples-vote-campaign-ask-electoral-commission-investigate

Hänska, M., & Bauchowitz, S. (2017). Tweeting for Brexit: How social media influenced the referendum. In J. Mair, T. Clark, N. Fowler, R. Snoddy, & R. Tait (Eds.), *Brexit, Trump and the media* (pp. 31–35). Abramis Academic Publishing.

Hern, A. (2019, July 30). Cambridge Analytica did work for Leave. EU, emails confirm. *The Guardian*. https://www.theguardian.com/uk-news/2019/jul/30/cambridge-analytica-did-work-for-leave-eu-emails-confirm

Hersh, E. (2015). *Hacking the electorate: How campaigns perceive voters*. Cambridge University Press.

Howard, P. N. (2005). Deep democracy, thin citizenship: The impact of digital media in political campaign strategy. *The Annals of the American Academy of Political and Social Science*, *597*, 153–170. http://www.jstor.org/stable/25046067

ICO Guidance. (2022). *Guidance for the use of personal data in political campaigning*. https://ico.org.uk/for-organisations/guide-to-data-protection/key-dp-themes/guidance-for-the-use-of-personal-data-in-political-campaigning-1

Information Commissioner's Office. (2018). *Investigation into the use of data analytics in political campaigns: A report to Parliament 6 November 2018*. https://ico.org.uk/media/action-weve-taken/2260271/investigation-into-the-use-of-data-analytics-in-political-campaigns-final-20181105.pdf

Kefford, G. (2021). *Political parties and campaigning in Australia*. Palgrave Macmillan.

Kefford, G., Dommett, K., Baldwin-Philippi, J., Bannerman, S., Dobber, T., Kruschinski, S., Kruikemeier, S., & Rzepecki, E. (2022). Data-driven campaigning and

democratic disruption: Evidence from six advanced democracies. *Party Politics*. Advance online publication. https://doi.org/10.1177/13540688221084039

Kelty, C. (2017). Too much democracy in all the wrong places: Toward a grammar of participation. *Current Anthropology*, *58*(S15), 77–90.

Kruschinski, S., & Haller, A. (2017). Restrictions on data-driven political micro-targeting in Germany. *Internet Policy Review*, *6*(4). https://doi.org/10.14763/2017.4.780

Mance, H. (2020, August 7). How the People's Vote fell apart. *Financial Times*. https://www.ft.com/content/e02992f6-cf9e-46b3-8d45-325fb183302f

Margetts, H., & Dommett, K. (2020). Conclusion: Four recommendations to improve digital electoral oversight in the UK. *Political Quarterly*, *91*(4), 745–750.

Markussen, H. (2022). After Cambridge Analytica: Rethinking surveillance in the age of (com)modification. In H. B. Jaffel & S. Larsson (Eds.), *Problematising intelligence studies: Towards a new research agenda* (pp. 201–219). Routledge.

Mayer-Schonberger, V. (2010). Beyond privacy, beyond rights—Toward a "systems" theory of information governance. *California Law Review*, *98*, 1853–1885.

Mills, S. (2019). *Who owns the future? Data Trusts, Data Commons, and the future of data ownership*. SSRN. https://doi.org/10.2139/ssrn.3437936

Montigny, E., Dubois, P., & Giasson, T. (2019). On the edge of glory (…or catastrophe): Regulation, transparency and party democracy in data-driven campaigning in Québec. *Internet Policy Review*, *8*(4). https://doi.org/10.14763/2019.4.1441

Mukhametov, D. R. (2021). Collective data governance for development of digital government. In *2021 International Conference on Engineering Management of Communication and Technology (EMCTECH)* (pp. 1–5). Institute of Electrical and Electronics Engineers.

Muldoon, J. (2022). *Platform socialism: How to reclaim our digital future from big tech*. Pluto Press.

Oliver, C. (2017). *Unleashing demons: The bestselling inside story of Brexit*. Hodder.

Ortega Martín, D., & Sánchez Berrocal, A. (2022). Nobody can trust or believe anything: Brexit, populism and digital politics. *Dilemata*, *38*, 83–102.

Owen, G. (2019, October 19). People's Vote coup plotters: Alastair Campbell and Peter Mandelson use dark arts to try to seize control of the second referendum campaign and topple its multi-millionaire boss Roland Rudd. *Daily Mail*. https://www.dailymail.co.uk/news/article-7592265/Alastair-Campbell-Peter-Mandelson-use-dark-arts-try-seize-control-referendum-campaign.html

Quick, K., & Bryson, J. (2016). Public participation. In C. Ansell & J. Torfing (Eds.), *Handbook on theories of governance* (pp. 159–168). Edward Elgar.

Risso, L. (2018). Harvesting your soul? Cambridge Analytica and Brexit. In C. Jansohn (Ed.), *Brexit means Brexit? The selected proceedings of the symposium, Akademie der Wissenschaften und der Literatur, Mainz 6–8 December 2017* (pp. 75–87). Akademie der Wissenschaften und der Literatur.

Rone, J. (2019). Fake profiles, trolls, and digital paranoia: Digital media practices in breaking the Indignados movement. *Social Movement Studies*, *21*(1/2), 25–41.

Rone, J. (2022). Instrumentalising sovereignty claims in British pro- and anti-Brexit mobilisations. *The British Journal of Politics and International Relations*. Advance online publication. https://doi.org/10.1177/13691481221089136

Rowbottom, J. (2020). The regulation of third party campaigning in UK Elections. *Political Quarterly*, *91*(4), 722–730.

Rowe, G., & Frewer, L. (2000). Public participation methods: A framework for evaluation. *Science Technology Human Values*, *25*(1), 3–29.

Sabbagh, D. (2019, November 20). How People's Vote collapsed after Roland Rudd's boardroom coup. *The Guardian*. https://www.theguardian.com/politics/2019/nov/20/how-peoples-vote-collapsed-after-roland-rudds-boardroom-coup

Shiner, B. (2019). Big data, small law: How gaps in regulation are affecting political campaigning methods and the need for fundamental reform. *Public Law*, *2019*(2), 362–379.

Simon, F. M. (2019). "We power democracy": Exploring the promises of the political data analytics industry. *The Information Society*, *35*(3), 158–169. https://doi.org/10.1080/01972243.2019.1582570

Singh, P. J., & Vipra, J. (2019). Economic rights over data: A framework for community data ownership. *Development*, *62*, 53–57. https://doi.org/10.1057/s41301-019-00212-5

Sloane, M., Moss, E., Awomolo, O., & Forlano, L. (2020). *Participation is not a design fix for machine learning*. ArXiv. https://doi.org/10.48550/arXiv.2007.02423

Smith, L. G. (1983). *Impact assessment and sustainable resource management*. Longman.

Stromer-Galley, J. (2019). Introduction: The paradox of digital campaigning in a democracy. In J. Stromer-Galley (Ed.), *Presidential campaigning in the internet age* (2nd ed., pp. 14–20). Oxford University Press.

Tufekci, Z. (2014). Engineering the public: Big data, surveillance and computational politics. *First Monday*, *19*(7). https://doi.org/10.5210/fm.v19i7.4901

UK in a Changing Europe. (2020). *Brexit interview: Richard Tice*. https://ukandeu.ac.uk/interview-pdf/?personid=42575

UK in a Changing Europe. (2021). *Brexit witness archive—Tom Baldwin*. https://ukandeu.ac.uk/brexit-witness-archive/tom-baldwin

Udris, L., & Eisenegger, M. (2023). Referendum campaigns in the digital age: Towards (more) comparative analyses in hybrid media systems. *Media and Communication*, *11*(1), 1–5.

Ulbricht, L. (2020). Scraping the demos: Digitalization, web scraping and the democratic project. *Democratization*, *27*(3), 426–442.

About the Author

Julia Rone is a postdoctoral researcher at the Minderoo Centre for Technology and Democracy at the Centre for Research in the Arts, Social Sciences and Humanities (CRASSH), University of Cambridge. Her research focuses on the dilemmas of digital sovereignty and the democratisation of trade and tech governance. She is the author of *Contesting Free Trade and Austerity in the EU: Protest Diffusion in Complex Media and Political Arenas* (Routledge, 2021).

Media and Communication (ISSN: 2183–2439)
2023, Volume 11, Issue 1, Pages 81–85
https://doi.org/10.17645/mac.v11i1.6653

Commentary

Does Social Media Use Matter? A Case Study of the 2018 Irish Abortion Referendum

Theresa Reidy [1,*] and Jane Suiter [2]

[1] Department of Government and Politics, University College Cork, Ireland
[2] School of Communications, Dublin City University, Ireland

* Corresponding author (t.reidy@ucc.ie)

Submitted: 30 December 2022 | Accepted: 23 January 2023 | Published: 31 January 2023

Abstract
The role of social media at electoral events is much speculated upon. Wide-ranging effects, and often critical evaluations, are attributed to commentary, discussions, and advertising on Facebook, Twitter, Telegram, and many other platforms. But the specific effects of these social media during campaigns, especially referendum campaigns, remain under-studied. This thematic issue is a very valuable contribution for precisely this reason. Using the 2018 abortion referendum in Ireland as an illustrative case, this commentary argues for greater research on social media at referendum campaigns, more critical evaluation of the claims and counterclaims about social media effects, often aired widely without substantive evidence, and, finally, for robust, coordinated cross-national regulation of all digital platforms in line with global democratic norms.

Keywords
abortion; campaign regulation; referendum; referendum campaign; social media

Issue
This commentary is part of the issue "Referendum Campaigns in the Digital Age" edited by Linards Udris (University of Zurich) and Mark Eisenegger (University of Zurich).

© 2023 by the author(s); licensee Cogitatio (Lisbon, Portugal). This commentary is licensed under a Creative Commons Attribution 4.0 International License (CC BY).

1. Introduction

In this commentary, we discuss the impact of social media on referendum campaigns, drawing specifically from the 2018 abortion referendum when the Republic of Ireland (hereafter Ireland) voted to repeal the country's near-total ban on abortion.

Social media use at electoral events was a global concern by 2018. The Cambridge Analytica scandal broke in late 2015, and social media manipulation had been highlighted in the Brexit referendum vote and the election of Donald Trump as president of the US in 2016. There was heightened sensitivity to the potentially corrosive political impacts of social media, and early research had ascribed some of the deep challenges to democracy to social media use (Tucker et al., 2017). These challenges can take many forms: polarisation of opinion (Marozzo & Bessi, 2018), microtargeting of political ads (Tromble et al., 2019; Zarouali et al., 2022), and the creation of echo chambers (Garimella et al., 2018). All of these concerns have been investigated, often during election campaigns, and some evidence of social media effects was identified. But the field is divided; Margetts (2018, p. 120) has argued that "the pathologies that they [social media] introduce are not terminal, but rather, chronic and under-researched, requiring careful study and long-term management," and Dommett and Temple (2018, p. 202) concluded that there "are significant areas of ambiguity" in understanding the implications of these trends.

The Irish vote on abortion in 2018 is useful to study in this regard; it attracted global media attention and shattered the final vestiges of Ireland's reputation as a conservative Catholic state. A referendum in 1983 had inserted a prohibition on abortion into the constitution, while the vote in 2018 repealed this restriction, and liberal abortion legislation was enacted. The vote was also the focus of global interest by international campaigners

on abortion rights, especially on the anti-abortion side, with US pro-life groups active in the campaign and in the preceding citizens' assembly. An intense campaign played out both on mainstream media and on social media. At an early stage in the campaign, the role of social media platforms became a major bone of contention with claims and counter-claims of online manipulation, misinformation and interference by international actors in the debate (Leahy, 2018). A series of voluntary withdrawals by the social media platforms from political advertising alleviated some concerns, but social media use remained a central aspect of the campaign.

Using data from the exit poll conducted by the public broadcaster (RTÉ) and Irish universities (for access to the data file, see Elkink et al., 2018), we demonstrate that social media platforms were used widely by all voter cohorts throughout the campaign but that some of the preconceived ideas about which side was benefiting from social media use were misguided and not supported by the data. Perhaps most importantly, a large majority of voters had made up their minds about how they would vote long before the campaign; as a result, the numbers open to persuasion were quite limited, no matter how effective the online campaigns were. Our central argument is that there are major gaps in scholarly knowledge about how referendum campaigns have changed with the advent of greater social media use. And while some research has suggested the enormous reach and impact of social media, much more evidence, specific to referendums, is needed to support these early conclusions. Indeed, social media use at referendums has been rather less considered than other electoral events, in part because referendums are relatively rare political occurrences. Renwick et al. (2020, p. 521) identified "accuracy, balance, accessibility and relevance" as the four dimensions of high-quality information at referendum campaigns, and social media manipulation has the potential to erode each of these. Social media campaigns were controversial and called into question misperceptions and disinformation in the 2022 defeated referendum on Chile's new constitution (Suiter et al., 2022). But the absence of regular large-scale studies of referendums means that there are sizable gaps in the understanding of how social media affects all of the four dimensions of information.

2. 2018 Referendum to Repeal the Constitutional Prohibition on Abortion

The 2018 Irish abortion referendum provides a useful illustrative case to reflect on some of the central questions of how social media affects the behaviours and attitudes of voters (for a general outline of voter behaviour, see Elkink et al., 2020). In Ireland, abortion referendum campaigns have a reputation for being deeply acrimonious and polarising. The 1983 referendum to introduce a constitutional prohibition on abortion was described as "an incessant campaign of unparalleled divisiveness, bitterness and rancour" (O'Carroll, 1991, p. 55). Four further referendums on abortion in 1992 and 2002 did little to change the underlying dynamics. By the early 21st century, pro-life activists were accused of importing US pro-life tactics and distributing material with images of late-term foetuses and the Holocaust alongside the names and details of public representatives (Walsh & McEnroe, 2013). The roots of the 2018 campaign can be traced to November 2012 when *The Irish Times* reported that a woman (Savita Halappanavar) had died in a hospital arising from miscarriage complications that were directly connected to the restrictive abortion regime. Public outrage was initially expressed on social media, and the case was reported by the international press. The pro-choice movement was galvanised into an intense and sustained crusade to liberalise abortion provision, but the deeply entrenched and well-funded anti-choice groups also mobilised their extensive networks into action for what became a six-year campaign. The government initially introduced very limited legislation, but in the aftermath of the 2016 general election, steps were taken to address abortion provision substantively. A national citizens' assembly recommended a referendum to repeal the constitutional prohibition and significant liberalisation, and this was endorsed by an all-party parliamentary committee. The official campaign began in March 2018 and lasted two months.

The 2018 referendum became the first Irish abortion referendum of the digital age. Both sides entered the digital fray with gusto and were very active on social media (Leahy, 2018). The "Yes" (pro-choice) side focused on women's stories, such as @TwoWomenTravel, which used Twitter to document the experience of women travelling to the UK for an abortion. The anti-abortion campaign ("No") focused on the idea that the proposed changes would result in "extreme abortion on demand." It also touched on nativist tendencies and suggested that the new system would be "too British" (Statham & Ringrow, 2022). However, on social media, it refrained from the use of graphic images of foetuses that did appear in some campaign literature. Concerns from the pro-choice side that anti-abortion advertising might be funded from outside the country were aired in the media and partly arose from the recruitment of a US anti-abortion speaker as one of the witnesses for the anti-abortion side in the preceding citizens' assembly. Further, the absence of regulations governing online political advertising and a generally moderate wider regulation framework (Reidy & Suiter, 2015) contributed to widespread anxiety among political elites that the campaign could be vulnerable to potential (foreign) interference and deep incivility.

In any event, several of the major social media companies decided to voluntarily withdraw political advertising from their platforms during the campaign. No doubt, global concerns about social media manipulation and domestic sensitivity to potential interference in the abortion referendum aligned and influenced the decisions.

Facebook announced, on May 8, 2018, that it would only accept ads from organisations based in the Republic of Ireland. Google followed suit and banned all political ads on May 9, citing fears that overseas organisations were targeting voters. The ban also applied to YouTube. Twitter had not allowed referendum ads from the very start of the campaign. This brings us to the first important point in this commentary: Many states, including those that regularly hold referendums, are unprepared for campaigns in a hybrid media environment. There are major gaps in the legal frameworks that govern political campaigns, and anomalous situations prevail where mainstream media are heavily regulated while digital media face almost no control. There is an urgent need for coordinated action on the regulation of the digital space. The Irish case highlights the particular need for this to be coordinated across states: The abortion referendum attracted many campaigners from outside the state, and digital platforms do not have national territorial distribution and access boundaries. Regulatory action must explicitly engage with these challenging realities.

The voluntary withdrawals did not mean that social media use was eliminated from the campaign, there was political advertising in the first week and widespread reports that ads continued to appear despite the moves by platforms to limit them (Gallagher, 2018). Furthermore, the abortion debate was a 40-year one in Ireland and paid advertising had been appearing on platforms for several years before the referendum was called. And campaign groups and voters could still debate and discuss all of the issues online. The second observation we make is that assumptions about the effectiveness and impacts of social media must be interrogated and challenged. The pro-choice side of the campaign strongly welcomed the political advertising bans and restrictions announced by the social media platforms at the start of the campaign, citing evidence of anti-abortion groups in the UK, US, and Canada purchasing ads. And the anti-abortion campaign was strongly opposed arguing that it was "shutting down a free and fair debate" (O'Brien & Kelly, 2018). Clearly, the "No" campaign felt that it had an edge in the online campaign. But these positions display a misunderstanding of which voter groups were open to persuasion and what tools were most effective at persuading them.

The RTÉ–Universities exit poll included data on the consumption of mainstream media (radio, TV, newspapers) and digital media (social media, online news) and reveals some interesting differences among voter cohorts. Table 1 shows that voters who used digital media during the abortion referendum campaign were distinctive and different to those that did not use online sources. In contrast to campaign narratives that the "No" campaign was effective on online platforms, the evidence shows people who used digital media of all forms were noticeably more likely to vote "Yes," and this result is statistically significant, including when controlling for age. Among those that never browsed online for news, the "Yes" vote was 47%, but it increased to 73% for those that browsed online on one or more days and reached 80% among those that browsed online every day. A similar pattern is evident in relation to social media use. Among those that never used social media, 53% voted "Yes." The average was 72% for those that browsed one or more days per week, and it rose to 82% for those using social media every day. Controlling for age, social media use was significant for the "Yes" side. We can also see that, on average, more respondents listened to the radio news and watched TV news than each of the other three media. This is consistent with Blassnig et al. (2023), who found that citizens tended to rely more on traditional news media to find information on referendums. And trust also matters; further data from the exit poll showed that social media were the least trusted of all media while television news was the most trusted. And lastly, "Yes" voters were noticeably more trustful of social media and digital news sources.

The message from this finding is that both campaigns were misguided in some of their assumptions and social media expectations. And following on from this, we must make a plea for a more comprehensive and sustained analysis of campaign activity and voting patterns at referendums.

Ultimately, the proposal to remove the constitutional ban on abortion was supported with an overwhelming "Yes" vote of 66% in favour, on a turnout of 64%. There was majority support for the proposal in all but one constituency. Most voters reported that they had made up their minds on how to vote within a considerable period, and 75% of people reported that they always knew how

Table 1. Media consumption.

Never	Watch TV news	Read a newspaper	Listen to radio news	Use social media	Browse online news websites and apps
Voted "Yes"	79.3%	75.2%	85.2%	53.4%	47.4%
Voted "No"	20.7%	24.8%	14.8%	46.6%	52.6%
Seven days a week	Watch TV news	Read a newspaper	Listen to radio news	Use social media	Browse online news websites and apps
Voted "Yes"	64.3%	64.8%	66.3%	81.5%	79.9%
Voted "No"	35.7%	35.2%	33.7%	18.5%	20.1%

Source: Elkink et al. (2018), (column percentages).

they would vote. Some important events, such as the death of the woman in a hospital in 2012, the citizens' assembly, and the parliamentary committee, were cited by 11% of respondents as influencing opinion in the period before the vote. While just 12% reported that they decided how to vote during the campaign (Elkink et al., 2020). This tells us that the campaigners were always going to face an uphill battle at the referendum since most voters had already decided how they would vote (Reidy, 2021). Social media, no matter how effective the digital ads and online conversations, were always only going to reach very narrow groups of voters. But referendum questions span an enormous variety of constitutional and policy topics, and much wider and deeper research is needed to assess campaign effects at different types of referendums.

The evidence from the 2018 abortion referendum is that digital media users (online news and social media) were more liberal, including when age is controlled for. But on this deep cleavage issue, most voters had made up their minds before the campaign started, so the potential for social media to alter opinions was very limited from the outset. Only a small number of voters were available to persuade. And when we look at these voters, we find that the vast majority leaned towards "Yes" during the campaign. And this is very much the case for social media users who skewed heavily towards a "Yes" vote and not "No," as had been apocalyptically speculated at times during the campaign. In fact, only those who never used social media skewed "No."

3. Conclusion

The 2018 abortion referendum provides important insights that should stimulate further research and reflection. In this case, social media did not matter all that much. It must be acknowledged that the potential impact of social media is variable at referendums. We need to conduct campaign studies across multiple contexts and on a variety of issues to understand the circumstances when social media is likely to be influential and when it is not. Given this variability, regulatory frameworks that are clear, comprehensive, and adaptive need to be urgently implemented. Social media companies should not decide the electoral decisions and events where digital advertising and other forms of communication will be allowed, or not. And we must challenge all assumptions about social media and the likely impacts that it can have. At the abortion referendum, the "No" campaign was deeply opposed to the restriction of its digital imprint, but the evidence showed that voters leaning towards that side were least likely to be found on digital platforms.

Acknowledgments

The 2018 abortion referendum exit poll was funded by Radio Teilifís Éireann, University College Dublin, Dublin City University, University College Cork, and ERC Starting Grant: NEW_DEMOCRACY ID: 759736.

Conflict of Interests

The authors declare no conflict of interests.

References

Blassnig, S., Mitova, E., Pfiffner, N., & Reiss, M. V. (2023). Googling referendum campaigns: Analyzing online search patterns regarding Swiss direct-democratic votes. *Media and Communication*, *11*(1), 19–30.

Dommett, K., & Temple, L. (2018). Digital campaigning: The rise of Facebook and satellite campaigns. *Parliamentary Affairs*, *71*(Suppl. 1), 189–202.

Elkink, J. A., Farrell, D. M., Marien, S., Reidy, T., & Suiter, J. (2018). *2018 abortion referendum survey* [Data set]. Harvard Dataverse. https://doi.org/10.7910/DVN/JELRGK

Elkink, J. A., Farrell, D. M., Marien, S., Reidy, T., & Suiter, J. (2020). The death of conservative Ireland? The 2018 abortion referendum. *Electoral Studies*, *65*, Article 102142.

Gallagher, F. (2018, May 24). Online ads still plaguing Irish abortion referendum despite Facebook and Google ban. *ABC News*. https://abcnews.go.com/International/online-ads-plaguing-irish-abortion-referendum-facebook-google/story?id=55395119

Garimella, K., De Francisci Morales, G., Gionis, A., & Mathioudakis, M. (2018). Political discourse on social media: Echo chambers, gatekeepers, and the price of bipartisanship. In P.-A. Champin, F. Gandon, & L. Médini (Eds.), *Proceedings of the 2018 World Wide Web Conference* (pp. 913–922). Association for Computing Machinery.

Leahy, P. (2018, March 30). Abortion referendum will see no policing of social media. *The Irish Times*. https://www.irishtimes.com/news/social-affairs/abortion-referendum-will-see-no-policing-of-social-media-1.3445005

Margetts, H. (2018). Rethinking democracy with social media. *Political Quarterly*, *90*(S1), 107–123.

Marozzo, F., & Bessi, A. (2018). Analyzing polarization of social media users and news sites during political campaigns. *Social Network Analysis and Mining*, *8*(1), Article 1.

O'Brien, C., & Kelly, F. (2018, May 9). Google bans online ads on abortion referendum. *The Irish Times*. https://www.irishtimes.com/business/media-and-marketing/google-bans-online-ads-on-abortion-referendum-1.3489046

O'Carroll, J. P. (1991). Bishops, knights—And pawns? Traditional thought and the Irish abortion referendum debate of 1983. *Irish Political Studies*, *6*(1), 53–71.

Reidy, T. (2021). Voting on abortion again and again and again: Campaign efforts and effects. *Éire-Ireland*, *56*(3), 21–50.

Reidy, T., & Suiter, J. (2015). Do rules matter? Categorizing the regulation of referendum campaigns. *Electoral Studies*, *38*, 159–169.

Renwick, A., Palese, M., & Sargeant, J. (2020). Information in referendum campaigns: How can it be improved? *Representation*, *56*(4), 521–537.

Statham, S., & Ringrow, H. (2022). "Wrap our arms around them here in Ireland": Social media campaigns in the Irish abortion referendum. *Discourse & Society*, *33*(4), 539–557. https://doi.org/10.1177/09579265221088132

Suiter, J., Paredes, F., & Coddou McManus, A. (2022). Where now for Chile? *Policy and Practice*, *2022*(35), 101–111.

Tromble, R., Jacobs, K., & Louwerse, T. (2019). *Transparency in digital political advertisements during the 2019 European Parliament elections: Country report on the Netherlands*. Netherlands Helsinki Committee; European Partnership for Democracy.

Tucker, J. A., Theocharis, Y., Roberts, M. E., & Barberá, P. (2017). From liberation to turmoil: Social media and democracy. *Journal of Democracy*, *28*(4), 46–59.

Walsh, L., & McEnroe, J. (2013, June 8). Gardaí probe threats to TD from anti-abortion pair. *Irish Examiner*. https://www.irishexaminer.com/news/arid-20233580.html

Zarouali, B., Dobber, T., De Pauw, G., & de Vreese, C. (2022). 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.

About the Authors

Theresa Reidy (PhD) is a senior lecturer in the Department of Government and Politics at University College Cork. She has published widely on electoral behaviour and political institutions, and her recent work has been published in *Electoral Studies*, *Parliamentary Affairs*, and *Politics*. She is co-editor of the *International Political Science Review* since 2016 and co-chair of the World Congress of Political Science in Buenos Aires (July 2023).

Jane Suiter (PhD) is a professor in the School of Communications at Dublin City University. Jane is the director of Dublin City University's Institute for Future Media, Democracy and has published in more than 40 journals, including *Science*, *International Journal of Political Science*, *Electoral Studies*, *Politics*, and the *International Journal of Communication*, and is the author of three books including *Reimagining Democracy: Lessons in Deliberative Democracy From the Irish Frontline* published by Cornell University Press and *Disinformation and Manipulation in Digital Media* with Dr Eileen Culloty.

MEDIA AND COMMUNICATION
ISSN: 2183-2439

Media and Communication is an international open access journal dedicated to a wide variety of basic and applied research in communication and its related fields. It aims at providing a research forum on the social and cultural relevance of media and communication processes.

The journal is concerned with the social development and contemporary transformation of media and communication and critically reflects on their interdependence with global, individual, media, digital, economic and visual processes of change and innovation.

www.cogitatiopress.com/mediaandcommunication