

March 2022

MIS-AND DISINFORMATION DURING THE 2021 CANADIAN FEDERAL ELECTION

A report of the Canadian election misinformation project. Remain tuned to local media for further information and instructions. <u>https://mediaecosystemobservatory.com/</u>















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MEDIA ECOSYSTEM OBSERVATORY

The Media Ecosystem Observatory is one of Canada's leading research institutes focused on Canadian information ecosystem health. The Observatory aims to better understand online harms and digital threats to democracy, and to safeguard against them.

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The Centre for Media, Technology and Democracy is McGill's focal point on critical research and public debate about the role of media and emerging technologies in shaping democracy and public life, pioneering research and policy activism on the interplay between media and technology and its relationship to public life and democracy.

Directed by Taylor Owen, Beaverbrook Chair in Media, Ethics and Communications, Associate Professor at the Max Bell School, and a leading voice in technology governance in Canada, the Centre is committed to public-facing work through a range of reports, events, podcasts and workshops aimed at translating cutting-edge research for broad public audiences and policy makers.

POLICY, ELECTIONS AND REPRESENTATION LAB

Led by Professor Peter Loewen, the Policy, Elections, and Representation Lab (PEARL) is a team of political scientists at the University of Toronto's Munk School of Global Affairs & Public Policy. PEARL'smission is to deliver timely, academically rigorous, and publicly relevant research that answers three big questions: How do individuals make decisions about politics? How do politicians make policy and represent citizens? And how is technology changing governance and politics?

Recommended citation: Bridgman, A., Lavigne, M., Baker, M., Bergeron, T., Bohonos, D., Burton, A., McCoy, K., Hart, M., Lavault, M., Liddar, R., Peng, P., Ross, C., Victor, J., Owen, T. and Loewen, P. (2022). Mis- and Disinformation During the 2021 Canadian Federal Election. Media Ecosystem Observatory.

Executive Summary

The Canadian Election Misinformation Project set out to document, evaluate, and protect against mis- and disinformation during the 2021 Canadian federal election. A team of researchers examined information flows in Canada during the election period across social and broadcast media and conducted a large nationally representative survey focused on misinformation attitudes, perceptions, and exposure.

2021 Election Findings

1) There was widespread misinformation during the 2021 Canadian federal election

The project extensively documented misinformation during the Canadian election, which existed on all social media platforms examined and across all communities followed.

- COVID-19 misinformation played an important role in the campaign. Protesters opposing pandemic health measures and vaccination policies, in many cases fuelled by mis- and disinformation, hounded several candidates and were able to push COVID-19 related concerns to the top of the campaign agenda.
- Claims of widespread voter fraud circulated on numerous social media platforms and among certain groups. Many of the claims being made were similar to narratives that emerged during and after the 2020 U.S. presidential election.

2) The overall election was minimally impacted by mis- and disinformation

The campaign period and results of the election were not driven by misinformation. Discussion of misinformation during the election focused on several discrete events and foreign interference was only discussed in relation to China.

- Misinformation incidents prompted little discussion, with the notable exception of Deputy Prime Minister Chrystia Freeland's tweet of an edited video that suggested that Erin O'Toole wanted to privatize healthcare.
- Canadians were similarly exposed to a selection of true and false stories during the campaign. However, Canadians were generally able to detect false stories and truthful stories were more likely to be believed.
- Chinese officials and state media commented on the election with an apparent aim to convince Canadians of Chinese origin to vote against the Conservative Party. Misleading information and information critical of certain candidates circulated on Chinese-language social media platforms. However, we find no evidence that Chinese interference had a significant impact on the overall election.

3) Canadians perceive misinformation as a threat to democracy but correctly recognized that it played a minimal role in the election

Canadians are concerned about mis- and disinformation and believe it threatens Canadian democracy in general. However, Canadians did not perceive misinformation to have been central in the campaign.

- Most Canadians believe the election was safe from foreign interference.
- A minority of Canadians believed that misinformation was a serious problem during the election and a quarter of Canadians reported seeing misinformation, with few of those able to recall specific incidents. Nevertheless, a strong majority of Canadians believe that misinformation is a threat to Canadian democracy, polarizes Canadians, and threatens social cohesion.

4) A cohesive misinformed and misinforming group has emerged

We observe the rise of a "big tent" of misinformation, where groups who hold false or conspiratorial beliefs about one topic appear to adopt similarly distorted opinions about a broad range of topics.

- Groups that previously focused on sharing COVID-19 misinformation were likely to adopt conspiracy theories about a broader set of topics, including vaccines, climate change, and the integrity of the Canadian election.
- These groups are increasingly distrustful of authoritative sources of information, including governments, experts, and mainstream media, and are turning to alternative information sources. Once there, they are exposed to ideas, facts, and news that is limited in diversity and tends to be strongly ideologically motivated.
- These groups have a different understanding of misinformation. They are more likely to report having seen misinformation during the election but use the label to refer to the content produced by "mainstream media" and political actors they dislike.
- These groups have perceptions towards truthful stories that are very different from the majority of Canadians.

Vulnerabilities

The report highlights vulnerabilities that must be addressed to protect the integrity of the information ecosystem. These vulnerabilities require a collective public response by governments, journalists, researchers, and the mass public.

1) A fracturing of the Canadian information ecosystem

Canadians are increasingly obtaining their political information from a range of untrustworthy sources. There is an increasing danger of echo chambers or filter bubbles where people will mostly be exposed to information that supports their existing worldview and/or promotes a narrow political view.

2) Increasing difficulties in detecting disinformation and coordinated information operations

The rise of platforms focused on privacy that exercise minimal moderation has led to a more vibrant and chaotic environment that can provide opportunities for those seeking to mislead, misinform, or manipulate. It has become more challenging for researchers, journalists, and policy makers to detect disinformation, inform the public, and otherwise defend against malign actors.

3) A gap between the reality and perceptions of mis- and disinformation

Broad perceptions that the information ecosystem is being systematically and continuously manipulated can sow distrust and undermine trust in all information sources and can ultimately erode confidence in democracy and the democratic process. This perception is somewhat disconnected with the reality of an information ecosystem characterized by relatively low impact manipulation.

4) An emerging set of Canadians who are deeply distrustful of Canadian democratic institutions

There is a growing number of individuals who no longer share the same factual reality as the majority of Canadians. These individuals coalesced during the first year of the COVID-19 pandemic and have recently become more networked and organized. Importantly, they are now also a part of a global distrustful network that draws upon events and arguments from disparate countries.

Moving forward

We provide four recommendations that can help address these challenges and build and maintain Canada's resilience to mis- and disinformation.

1) Develop a community of practice focused on tackling misinformation in Canada

Canada would benefit from a more coordinated approach to protecting against misinformation. A community of practice should be established with the end goal of identifying and defending against misinformation vulnerabilities among the broad Canadian public, as well as among specific linguistic, geographic, and cultural communities.

2) Engage in strategic countering of misinformation

Misinformation presents a continuous and evolving challenge, however, not all misinformation is threatening. Strategic decisions should be made about which false claims to debunk based on their origin, attention and engagement, and their potential damage, as well as the likelihood of a successful intervention.

3) Increase public resilience to misinformation

Concerted action to cultivate trust in democratic institutions is required, including but not limited to: more transparent government communications; improved science communication by the research community; more diverse algorithmic news feeds that prioritize reliable sources of information; support for local journalism; less toxic partisanship from political leaders; and better care from news media to avoid conflating opinion and reporting.

4) Extend initiatives to limit and counter misinformation to non-election periods

Elections are not the only moments when mis- and disinformation matter. The threat to democracy may lie more in the slow and steady erosion of factual agreement, institutional trust, and social cohesion. Those involved in monitoring and countering misinformation should consider extending their activities to non-election periods. Governing bodies may also wish to examine whether the regulatory regime in place during elections should be broadened to cover non-election periods.

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Introduction

Mis- and disinformation are key contemporary democratic challenges. False and misleading information spread unintentionally or with nefarious intent has been shown to undermine common factual understandings that underpin democratic deliberation and collective action. Democracies worldwide have witnessed increasing volumes of this malign information, mostly coming from populist leaders, alternative media, and polarized citizens. Foreign actors have used it to attempt to undermine free and fair elections and foster divisions in democratic societies.

Canada is not immune to these global trends. The 2019 Canadian federal election saw relatively low levels of misinformation and disinformation that nevertheless threatened to erode and degrade the public sphere.¹ During the COVID-19 pandemic, misinformation circulated widely and predominantly on social media and increased the likelihood that individuals would not follow public health measures.² In response to these trends, as well as mounting concerns from numerous government bodies that foreign interference was likely, the *Canadian Election Misinformation Project* was established.

This project was a civil society and academic partnership that sought to: 1) rapidly identify and respond to mis- and disinformation incidents during the 44th Canadian federal election; 2) evaluate the extent to which these incidents affected the attitudes and behaviours of Canadians; and 3) develop an understanding of the types and consequences of misleading and false information circulating in the public sphere. This report captures its main findings.

Defining Mis- and Disinformation

While misinformation and disinformation both refer to false or misleading information, *disinformation* implies that false or misleading information is intentionally created or shared to mislead or cause harm, whereas misinformation also encompasses false information shared accidentally or unintentionally. Throughout the report, we use the word misinformation to refer to false information spread by social media users when identifying the intentions of those (often anonymous) users is not possible. Conversely, we use the word disinformation when discussing foreign interference, given the more deliberate nature of the activity.

Data collection and methodology

The Project collected data in three ways:

1. Scanningsocial media: Researchers collectively spent hundreds of hours on social media platforms following conversations about Canadian politics and the election. This gave the research team an unparalleled view into the political information churn and the ways in which information flows within and across social media platforms. Throughout the report, screenshots and narratives from these scans highlight important facets of the conversation as they relate to misinformation. (See Appendix A for more details.)

- 2. Collectingbroadcast media: A large volume of social and broadcast media concerning the election was collected across Facebook, Instagram, Reddit, and Twitter. These platforms are those where large-scale data collection is possible using Application Programming Interfaces (API). Headlines and article summaries were collected using Facebook pages of broadcast media, where every story is typically posted. (See Appendix B for more details.)
- **3. Surveying Canadians:** The Project fielded a large rolling nationally representative survey that captured Canadians attitudes and opinions regarding the election campaign, with a particular focus on misinformation. Nearly 7,000 Canadians were surveyed from Aug. 23 to Sept. 20. An additional survey resampled approximately 2,500 of these individuals starting on Sept. 30 to compare preand post-election attitudes and behaviours. All analyses used data weighted on age, gender, and region. (See Appendix C for more details.)

Content of the report

The report consists of eight sections. Section 1 provides background information about international trends in mis- and disinformation and the factors that have historically made Canada relatively resilient to misinformation. Section 2 consists of an overview of Canadians' attitudes towards misinformation. It presents survey findings about what is considered misinformation in the eyes of Canadians, whether Canadians believed they were exposed to misinformation during the 2021 federal election campaign, and the perceived threat posed by misinformation to the election as well as to Canadian democracy more generally. Section 3 details misinformation incidents uncovered during the campaign and compares their reach and perceived truthfulness to that of factually accurate stories.

Sections 4 to 6 examine misinformation across the information ecosystem from three perspectives: platforms, issues, and communities. Section 4 assesses social media platforms and includes details on the type and amount of misinformation and how content was moderated. Section 5 provides a description of misinformation circulating on salient issues during the campaign (including vote-related misinformation and COVID-19 misinformation) and evaluates whether and how it influenced the election. Section 6 breaks down the spread of misinformation among different communities, including French-speaking communities, rural communities, Indigenous communities, and South Asian communities.

Section 7 reviews evidence of foreign interference on social media platforms during the campaign. Section 8 summarizes the trends observed during our examination of mis- and disinformation during the 2021 Canadian election campaign and presents recommendations to increase resilience to mis- and disinformation in Canada and elsewhere.

This report sheds light on the role that mis- and disinformation played in the 2021 Canadian federal elections, how citizens perceive misinformation and what explains these perceptions, and the techniques used to spread disinformation and avoid content moderation. We believe that this report will provide important insights to government, media, civil society organizations, researchers, social media platforms, and the mass public. We collectively have an interest in protecting our information ecosystem during and beyond election periods.

01 Global Context

SUMMARY:

- The tactics used by large-scale, foreign influence and disinformation operations have increasingly been employed by non-state actors including hate groups, extremist organizations, and populist political parties.
- There is an increasing narrative overlap between election mis- and disinformation and political extremism. Disinformation tactics are no longer simply the dissemination of 'fake news' stories by easily identifiable bot networks. They now include more subtle manipulation of pre-existing polarized issues, such as immigration, equity-advancing policies, climate change, and LGBTQ+ rights.
- Media and government focus on the possibility of election influence and disinformation, combined with narratives intentionally spreading disinformation about election fraud, have been associated with increasing distrust in the voting process and electoral system. These are best exemplified by the ongoing accusations of election fraud in the United States following the 2020 presidential election.
- Canada has historically been considered relatively resilient to mis- and disinformation and has adopted a series of measures to limit the spread of misinformation over the past years. Canada nevertheless presents some vulnerabilities, including increasing polarization and distrust. Given Canadians' high levels of exposure to U.S.-based information, Canadais vulnerable to the polarization and misinformation circulating in the United States.

Foreign interference

Over the past decade, researchers and journalists have uncovered multiple instances of influential electionperiod interference from foreign actors. Democracies around the world have come to expect that foreignproduced disinformation and influence operations will attempt to influence the outcomes and agendas of their elections.

Foreign interference during the 2016 U.S. presidential election has been widely documented, where a well-resourced Russian operation was found to have produced and shared an enormous volume of false, misleading, or divisive content. Thousands of posts from accounts linked to a Russian state operation were amplified and widely viewed on Facebook and Twitter, especially in swing states. Thousands of advertisements coming from "coordinated and inauthentic" Russian accounts were promoted on Facebook and Instagram. ³ A study by Allcott and Gentzkow claimed that "the average U.S.adult read and remembered" between one and three fake news articles on Facebook in the runup to the 2016 presidential election. ⁴ The same study also found that individuals were exposed to a greater number of pro-Trump than pro-Clinton articles. A study of U.S.Facebook use found that disinformation campaigns accounted for a very large share of political advertisements on the platform. Suspicious groups (including foreign entities) not registered to the Federal Election Commission (FEC)produced 60% more political advertisements on Facebook than FEC-registered groups.⁵ Further analysis of these "anonymous groups" uncovered microtargeting of specific geographic and demographic communities with divisive content.

Similar patterns were observed in the 2017 German elections, with influence operations stemming from both foreign state and non-state actors.⁶ Here, the German far-right party, the Alternative für Deutschland (AfD) exhibited obvious ties to Russia, with Kremlin-linked media outlets producing unwaveringly pro-AfD content. In addition, Kremlin-affiliated media sought to aggravate pre-existing political wedge issues by aiming online content at the German far right and far left, as well as the Russian-German community. Research of the German context suggests that online disinformation helped bolster voter support of the AfD at the expense of mainstream political parties. ⁷

During the 2019 general election in the United Kingdom, there appeared to be an Indian state-backed influence operation aimed at British-Indians. ⁸ Twitter accounts spread pro-Conservative and anti-Labour Party messaging. A Venezuelan Twitter network produced anti-Muslim disinformation in Spain during the 2019 EUparliamentary elections. ⁹ These are just some illustrations of the evolution of influence operations, where traditionally Russian propaganda operation tactics have been increasingly adopted by other states and non-state actors.

There is evidence that foreign actors have meddled in Canadian elections on social media as far back as 2015. ¹⁰Ahead of the 2019 Canadian federal election, the Canadian Security and Intelligence Service (CSIS) warned federal political parties about potential foreign influence operations targeting Indian and Chinese diaspora communities, as well as misinformation stemming from Iran, Saudi Arabia, Pakistan, and Venezuela.¹¹ While it did not directly look at election-related content, the 2019 Annual Report from the National Security and Intelligence Committee of Parliamentarians recognizes the threat posed by disinformation stemming from Russian and Chinese actors. ¹²

Research conducted from 2005 to 2020 by the EU DisinfoLab revealed a large-scale, Indian-based disinformation network operating at least 265 websites in over 65 countries.¹³ 12 of these sites were found to have connections to Canada, posing as current or defunct media outlets. While these websites were not found to be overly active, the network was highly sophisticated and connected to a web of fake think tanks and NGOs.

The role of right-wing extremists

The integral role played by the transnational community of right-wing extremists in spreading online disinformation became increasingly apparent during the 2018 Swedish election. Domestic far-right groups engaged in small and erratic attempts to sow disinformation and hate in the run-up to the election, with little success. However, networks from the U.S., U.K., France, Germany, Poland, and Hungary were much more effective. Swedish far-right actors operated on fringe platforms like 4chan and Discord, whereas the efforts of their international counterparts were amplified in multiple languages by Kremlin-affiliated media outlets.¹⁴ Similar tactics were used by far-right actors to mobilize before the national elections in France, Germany, Italy, and Bavaria in 2017 and 2018.¹⁵

Disinformation tactics increasingly rely on manipulating contentious narratives. Investigations by the Institute of Strategic Dialogue found that disinformation efforts in the run-up to the 2019 European parliamentary elections were directed at political wedge issues in order "to spur polarization along 'culture war' lines and erode trust in democratic institutions." ¹⁶ These narratives also tend to overlap those espoused by right-wing extremists. For example, researchers identified disinformation targeting Muslim and Jewish communities. In Poland, a network of Twitter accounts produced disinformation about Jewish history and financial compensation for the Holocaust. A Venezuelan Twitter network promoted anti-Islam content in Spain during the lead-up to the European parliamentary elections, including a video of a riot that purported to be from a Muslim majority neighbourhood in France.

Similarly, there was an increase in the volume of anti-immigrant content on social media in the lead-up to the 2019 U.K. election. While right-wing extremists still operate largely on fringe online platforms, right-wing extremist narratives are increasingly appearing on mainstream platforms.¹⁷ Having their content appear on, for example, Facebook and Twitter, allows the views to be shared with a larger number of people.

Disinformation on the election process and distrust of the democratic system

In addition to using political wedge issues to foster polarization, extreme-right actors have increasingly sought to undermine the democratic process through disinformation campaigns targeted at allegations of election fraud. Early examples of this theme of disinformation were present in the 2016 Brexit referendum, the 2017 German federal election, the 2018 Swedish election, and the 2018 U.S.midterm elections. In each of these cases, right-wing extremist groups campaigned to stop people from voting and, more generally, questioned the "fairness and integrity of the voting process."¹⁸ In the 2019 U.K. election, extreme-wing actors pushed content alleging that left-wing political parties were purposely bringing in immigrants to gain more votes and claimed that immigrant families —namely Muslims —were engaging in widespread voter fraud through mail-in ballots.

Todate, the most striking example of election and voting fraud disinformation was in the run-up and aftermath of the U.S.2020 presidential election. Institute for Strategic Dialogue (ISD) researchers tracked an array of claims of voter fraud, influenced by previous narratives of illegally cast mail-in ballots, now connected to absentee voting, including allegations that deceased individuals cast ballots, citizens voted multiple times, and ballots cast for Donald Trump were destroyed. In the aftermath of the election, a range of conspiracies involving Dominion voting machines became especially prominent. Many Republicans continue to believe that Trump won the 2020 election.

While the exact impact that disinformation has on election results is debated, studies suggest that it can

alter voting habits.¹⁹ Zimmermann and Kohring argue that discussions of disinformation and fake news must be treated as a "symptom of a more deep-rooted public disaffection with the news media as well as the political system."²⁰ Disinformation is both a signal and a source of distrust in democracy and the electoral process.

Canadian resilience to mis- and disinformation

Canada has a relatively high resilience to mis- and disinformation. This resilience partly stems from its relatively high level of trust in mainstream media²¹, low disinformation production of broadcast media outlets ²², and its comparatively low levels of societal polarization and populist communication. ²³ Canadians report high levels of misinformation exposure on social media platforms and tend to be distrustful of the information encountered there. ²⁴

In the past five years, the Canadian government has implemented a series of measures to combat the spread of misinformation in Canada. The Critical Election Incident Public Protocol was put in place in 2019 to primarily alert the public of severe cases of election interference. The Digital Citizen Contribution Program was established to support research and citizen-focused activities aimed at increasing resilience to disinformation. Three major federal political parties —the Liberal Party, the Conservative Party, and the New Democratic Party — signed a pledge in April 2019 where they committed not to create or spread disinformation. These efforts potentially helped prevent disinformation from playing a major role in the 2019 Canadian election.²⁵

That being said, there are multiple reasons why mis- and disinformation were expected to be more salient in 2021. First, the COVID-19 pandemic is a good reminder that Canada is not immune to misinformation. Despite politicians and medical experts' consensus on the severity of the virus and the necessity of a strong policy response to fight its spread ²⁶, we know that a great number of Canadians —only slightly lower than that of the United States — endorsed misinformation about COVID-19 in the first stages of the pandemic. ²⁷ Given that the 2021 federal election was called during the pandemic, amidst heated discussions on the implementation of vaccine mandates, we expected COVID-19 misinformation to have some influence on the campaign.

Moreover, as described above, the 2020 U.S. election was marked by allegations of massive vote fraud, some of them made by the incumbent president himself. Given the influence of the U.S. on Canadian politics and the fact that a record number of Canadians were expected to vote by mail, there was a strong possibility that these narratives could surface in the 2021 Canadian election.

CSISand CSEreleased reports on foreign interference in July 2021. In its report, CSISindicated it "continues to observe steady, and in some cases increasing, foreign interference activity by state actors" and suggested that "these activities will almost certainly intensify." ²⁸ The CSE report stated that it was "very likely that Canadian voters will encounter some form of foreign cyber interference ahead of, and during, the next federal election." ²⁹ Therefore, we prepared to monitor social media for foreign interference or coordinated disinformation campaigns during the 2021 Canadian federal election.

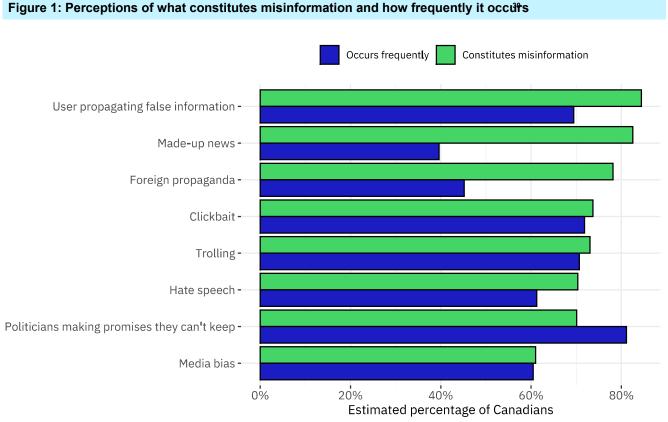
02 Canadians' attitudes toward misinformation

SUMMARY:

- Canadians perceive many common political phenomena as misinformation, from politicians exaggerating their promises to the publication of completely made-up stories by a media organization to hate speech. There is significant ambiguity and politicization of the term.
- Approximately a quarter of Canadians reported seeing misinformation during the campaign, while approximately 40% believed misinformation was a serious problem during the election.
- A strong majority of Canadians believe that misinformation is a threat to Canadian democracy, is polarizing Canadians, and threatens social cohesion.
- Supporters of right-wing parties (Conservative and People's Party) report higher levels of exposure to misinformation. However, they did not think of misinformation as a more serious problem during the election and tend to perceive misinformation as less threatening to democracy.
- Canadians are largely in favour of content moderation but tend to believe that social media platforms and not governments should be making moderation and banning decisions.
- There are significant differences in perceptions of misinformation and support for content moderation across partisan lines, socio-demographic groups, and media consumption patterns.

Identifying misinformation and its effects

While misinformation, disinformation, and fake news are terms Canadians are familiar with, the Project gave us the chance to survey Canadians to learn what they consider to be misinformation and how prevalent they believe it to be. Canadians think that, while mis- and disinformation are serious threats to Canadian politics and democracy, the 2021 federal election was not affected by any serious instance of misinformation. We presented Canadians with a variety of scenarios and asked them to what extent they would consider each scenario a form of misinformation (see Figure 1). Canadians identified many common political phenomena as misinformation, which ranged from generally recognized forms of misinformation, such as the spread of false information on social media (84%) and the publication of completely made-up stories by a media organization (83%), to less common forms, such as politicians making promises they cannot keep (70%), trolling (73%), hate speech (70%), or media bias (61%). Respondents also reported that they believe each of these forms of misinformation occurs frequently. That said, the forms of misinformation involving an intent to mislead or cause harm (i.e. disinformation such as news fabrication or foreign propaganda) are perceived as occurring less frequently than more benign forms of misinformation. A large percentage of Canadians also don't know whether some forms of misinformation occur frequently, especially relating to phenomena like foreign interference (25%).



Weighted percentage of respondents believing that different situations constitute misinformation and occur frequently in Canada. The exact wording of each situation can be found in endnote 30. Based on around 800 observations from the post-election survey. The 2,576 respondents to the post-election survey were each asked about a random subset from this list. Despite the perceptions that misinformation encompasses many different situations and occurs frequently, only 24% of respondents felt that they were exposed to false or misleading information during the election campaign, while 54% of respondents were unsure (see Figure 2). Among Canadians who reported seeing such misinformation, only 8% (representing only 2% of all respondents) of this group was able to identify a specific example of the misinformation they encountered. ³¹ For those who were able to point to a specific misinformation story, it most related to COVID-19, gun control, Chrystia Freeland's tweet of a misleadingly edited video (see more information on this event on page 21), or false or deceptive political advertising. Many respondents took advantage of the opportunity to explain what misinformation they encountered during the campaign to blame adversarial political or media targets. Accusatory answers mostly targeted Justin Trudeau and mainstream media (especially the CBC).

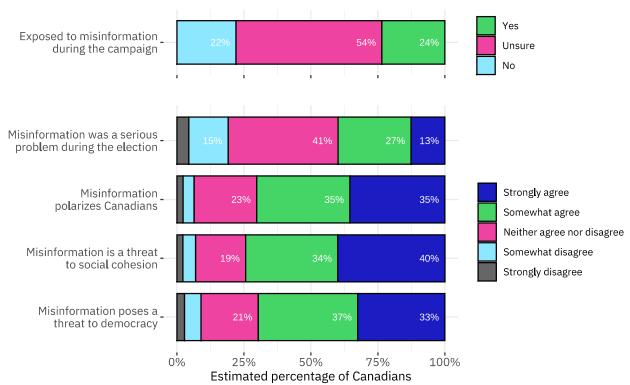


Figure 2: Self-reported exposure to false or misleading information during the election campaign and attitudes towards misinformation

Weighted percentage based on around 2500 observations from the post-election survey

While 70% believe misinformation is a serious threat to Canadian democracy, polarizes Canadians, and threatens social cohesion, only 40% of respondents believed misinformation was a serious problem during the last election. More than 40% of respondents were unsure whether misinformation was a serious problem during the election (i.e., they selected "neither agree nor disagree). This uncertainty was more common among Canadians who are not interested in politics and those who are unsure whether they encountered misinformation during the election. Specifically, 53% of respondents whose level of political interest is 5/10 or less and 50% of respondents who didn't know whether they were exposed to misinformation during the campaign selected "neither agree nor disagree" as their answer.

Party affiliation and socio-demographicdifferences

We further investigated the factors influencing citizens' exposure to and attitudes toward misinformation during the election using Ordinary Least Square regression. We paid particular attention to the role of sociodemographic characteristics (age, gender, education, ethnicity, region), rural-urban identities (respondents who do not identify as rural or urban as the reference category), partisan identification (non-partisans as the reference category), and news exposure (frequency of exposure to political information on broadcast and social media). Perceptions that misinformation is a threat to Canadian democracy, polarizes Canadians, and threatens social cohesion were averaged into a threat perception index, with high values corresponding to perceptions that misinformation poses an important threat to Canadian society and democracy.³²

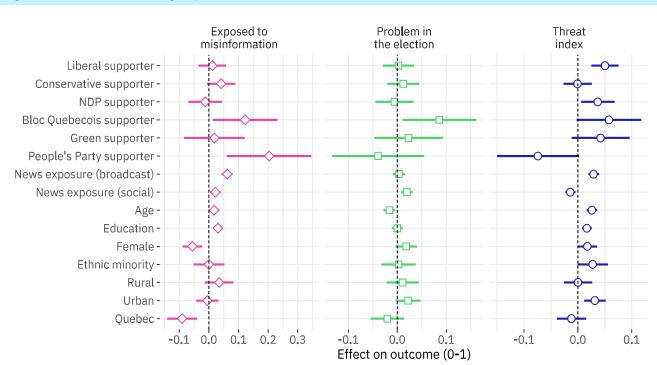


Figure 3: Factors influencing exposure to and attitudes towards misinformation

Unstandardized coefficients shown based on three OLS regression models with sample sizes between 2287 and 2553 respondents. All variables are measured on 0-1 scales. An estimate below zero means that the variable has a negative impact on the outcome (e.g., exposure to misinformation), whereas an estimate above zero means that it has a positive impact.

We found that supporters of the People's Party³³, the Conservative Party, and the Bloc Quebecois were more likely to report that they were exposed to false or misleading information during the election campaign (see Figure 3). The effect was particularly strong for supporters of the People's Party, who were 20 percent more likely to report that they were exposed to misinformation than non-partisans. However, supporters of the People's Party were also the most likely to hold false or conspiratorial beliefs about COVID-19 and the election, which is discussed further below (see pages 37 and 41 for more details). Respondents who are men, older, more educated, live outside of Quebec, and frequently exposed to political information on broadcast and social media were also more likely to report seeing misinformation during the campaign. Surprisingly, the more respondents were exposed to broadcast political news during the campaign (measured in terms of frequency of exposure to news about politics over the past week), the more likely they were to

state that they had also encountered false information —even more than those who received most of their political information on social media. We did not find any significant differences in self-reported exposure to misinformation among ethnic and racial minorities or between rural and urban Canadians.

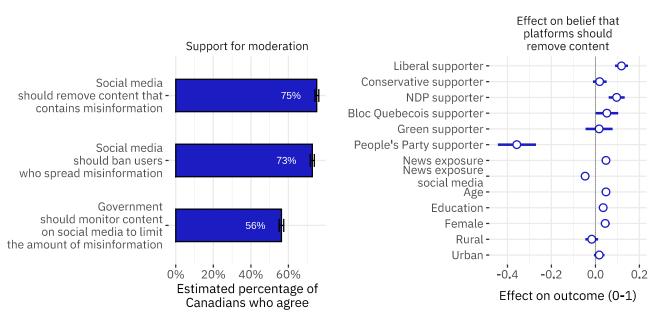
Despite being less likely to say that they saw or heard misinformation during the campaign, younger Canadians were more likely to report that misinformation was a serious problem during the election. Exposure to political information on social media and identifying as an urban Canadian was also associated with higher perceptions that misinformation was a serious problem in the 2021 election.

Perceptions of misinformation being a threat to democracy (i.e., as polarizing Canadians and as a threat to social cohesion and Canadian democracy) were more common among Liberal, NDP, and Bloc Québécois supporters and less common among those who identify with the People's Party. Supporters of the Conservative Party had similar threat perceptions than those who identify with no party. In addition, older, more educated, urban Canadians were also more likely to perceive misinformation as a threat to Canadian society and democracy. Those who frequently consumed political news were also more likely to perceive misinformation as a threat, while those who consumed political news on social media tend to perceive misinformation as less threatening.

Attitudes towards content moderation

We examined how Canadians feel about different types of content moderation and used OLSregression to identify the individual-level characteristics that predict support for content moderation on social media. As shown in Figure 4, Canadians are largely in favour of content moderation and believe that it is the role of social media platforms, rather than the government to do so. A significant majority of Canadians agree that social media platforms should remove content that contains misinformation (75%) and ban users who spread misinformation (73%).³⁴ A smaller majority believe that the federal government should monitor content on social media to limit the amount of misinformation Canadians are exposed to (56%). Canadians who identify with the Liberal Party and the NDP are significantly more likely than those who identify with no party to be in favour of social media platforms removing content that contains misinformation from their platform, while supporters of the People's Party are more likely to oppose content moderation from social media platforms. In fact, less than 30% believe that social media platforms should monitor content or ban users who spread misinformation. Older and more educated Canadians, women, and people who frequently consume news from traditional media are significantly more likely to support content moderation from social media platforms, while those who frequently consume news on social media are less likely to support content moderation from social media platforms, while those who frequently consume news on social media are less likely to support content moderation from social media platforms, while those who frequently consume news on social media are less likely to support content moderation from social media platforms.





Based on pre-election survey with a sample of 6910 observations. The left panel shows the weighted percentage of respondents who somewhat agree or completely agree with the statement. The right panel shows OLS regression coefficients with 95% confidence intervals. Regional fixed effects not plotted. An estimate above zero means that the variable increases support for social media platforms removing content that includes misinformation, whereas an estimate below zero means that it decreases support for this type of content moderation.

03 Election misinformation incidents

S U M M A R Y

- The reach and effect of four misinformation incidents were compared to four truthful stories during the election. Canadians were similarly exposed to these true and false stories during the campaign. However, truthful stories were in general more likely to be believed than false stories.
- Misinformation that closely resembles the truth is more likely to be widely seen and believed, while fringe misinformation that covers new ground is less likely to be seen and believed.
- Significant media attention on pieces of misinformation can lead those stories to be more widely seen and believed than true stories.
- Misinformation incidents prompted little discussion, measured as both broadcast media and social media attention, on misinformation more broadly, with the notable exception of Freeland's tweet.
- Once produced, misinformation can rapidly spread widely and impact attitudes and behaviours, and then just as quickly dissipate into the continuous churn of political news. A key part of the project was to try and capture important misinformation incidents to better understand the emergence and reach of false or misleading information during an election. We focused on issues that were likely to reach a large number of Canadians.

Our identification and response to the incidents were guided by the following protocol:

1	Monitor	 Monitor traditional and social media content for misinformation using an algorithmic and ethnographic approach
2	Decide	• Evaluate a piece of misinformation for its potential to be consequential for the election and/or citizens' attitudes and behaviors (early engagement, novelty, salience, target, etc.)
3	Investigate	 Investigate the provenance, importance, and impact of the misinformation Evaluate the misinformation's spread across social and broadcast media Use surveys to evaluate the impact of the misinformation on citizens' knowledge and attitudes
4	Respond	 Provide journalists and government bodies with the analysis related to the misinformation Inform and inoculate the public through media appearances and a rapid-response memo

The identification of incidents was informed by online ethnography, with researchers from the project following conversations about Canadian politics and the election across a variety of platforms, communities, and issues to identify new narratives emerging and detect misinformation before it becomes viral. When misinformation was detected, we evaluated its reach (early engagement and spread across platforms) and potential to be consequential for the election, based on its target, novelty, and the salience of the issue. When appropriate, we engaged in a response protocol, in which case we investigated the origin, importance, and impact of the incident. This consisted of (1) documenting the reach and reactions to the incident through incident-specific monitoring across social media platforms; (2) evaluating how much and how the media covered the incident; and (3) adding questions about the incident in our daily survey to assess its spread and impact among the general public.

In this section, we are particularly interested in evaluating the following questions:

- 1. How much were Canadians exposed to major misinformation stories as compared to accurate news stories circulating during the campaign? Did this exposure grow over time?
- 2. How much Canadiansbelieved the misinformation stories they were exposed to during the campaign? Is the perceived truthfulness of false stories lower than that of accurate stories?
- 3. Was exposure to and the perceived truthfulness of accurate and false stories significantly different across partial lines?
- 4. How much were misinformation, disinformation, and foreign interference discussed in broadcast media and across social media platforms throughout the election cycle? Were concerns over misinformation, disinformation, and foreign interference significantly different from the 2019 Canadian federal election?

Misinformation incidents

During the election, we identified four stories circulating on social media platforms that met our threshold for misinformation incidents:

Incident 1: Erin O'Toole wants to privatize the Canadian healthcare system.³⁵ Chrystia Freeland, a Liberal Party member of Parliament and deputy prime minister, posted an edited video clip of Conservative Leader Erin O'Toole that was initially broadcast during his leadership campaign. In the clip shared by Freeland, O'Toole responds "yes" when asked whether he supports private options in health care reform. In the original, unedited video, O'Toole expands his answer to include that he wants to explore public-private synergies while maintaining universal access, a nuance which the clip posted by Freeland edits out. This incident gained a large amount of media attention, particularly after Twitter flagged Freeland's post as "Manipulated Media." See the Issue misinformation section below for more details.

Incident 2: The Liberals are preparing to impose a climate lockdown on Canadians, which will include restrictions on movements to cut greenhouse gas emissions.³⁶ Cheryl Gallant, a Conservative Party member of Parliament, posted a video on YouTube in June 2021 that claimed "How long do you think it will take before the Trudeau Liberals start calling for a climate lockdown?" This story resurfaced in August during the campaign, partially due to a campaign flyer released by Gallant. Erin O'Toole did not directly condemn Gallant's statement, but the Conservative Party instructed Gallant to take down the video.³⁷ These claims were condemned by Trudeau.³⁸ See the Issue misinformation section below for more details.





Incident 3: Protestors have been disrupting Justin Trudeau's political rallies during the election campaign, as part of a centralized operation that aims to prevent the Liberals from campaigning in key ridings.³⁹ Throughout the election, many of the campaign stops by Justin Trudeau were subject to protests, largely by individuals and groups opposed to the vaccine policies implemented and proposed by the Liberals. While some evidence of small-scale, organic coordination exists for protests, large-scale, centralized coordination to protest these stops had not been uncovered.⁴⁰

Incident 4: Justin Trudeau instructed Jody Wilson-Raybould, the former attorney-general of Canada, to lie about the SNC-Lavalinaffair.⁴¹ Neither Wilson-Raybould nor Trudeau have stated that there was an explicit instruction to lie, but Wilson-Raybould stated that she "knew he wanted me to lie" — a claim contested by Trudeau.⁴² This story, largely covered by the media in 2019, was resurfaced when Wilson-Raybould released her book during the campaign period. While much of the story is based on competing claims of the interactions between Wilson-Raybould and Trudeau's affiliates, some coverage of the issue exaggerated claims to the point of misinformation and explicitly claimed Trudeau asked Wilson-Raybould to lie.

Factual stories

We compared these misinformation stories with four accurate stories that were relevant for the election.

Story 1: Justin Trudeau has demanded that all federal public servants without legitimate medical reasons get vaccinated. He has further warned that there will be "consequences" for those who choose to not be vaccinated.⁴³ On Aug. 17, Trudeau announced federal public servants would need to get vaccinated against COVID-19. While he mentioned there would be consequences for those who did not get vaccinated, no details were given.



It's amazing how these *protestors* always show up to disrupt Trudeau events in southern Ontario ridings that are LPC/CPC fights. State: #Elxn44

🗬 Annie Bergeron-Oliver 💿 @AnnieClaireBO · Sep 5, 2021

Trudeau is trying to very quickly say hello and greet supporters who have shown up at a local Newmarket restaurant to say hello. It's so loud. The protesters have brought megaphones and closed in on the restaurant patio. Supporters are waining their signs.



7:30 AM - Sep 6, 2021 from Ottawa, Ontario - Twitter for iPhone



43 Retweets 8 Quote Tweets 117 Likes

Story 2: Multiple campaign events organized by the Liberal Party have been canceled or postponed because of hostile anti-vaccine mandate protesters.⁴⁴ Liberal campaign stops throughout the election were attended by protestors. A campaign event in Cambridge, Ontario, was delayed and another in Bolton, Ontario was canceled because of security concerns. Other parties condemned these actions.

Story 3: Erin O'Toole has pledged to increase Canada's vaccination rate beyond 90% within two months of being elected.⁴⁵ While campaigning, the Conservative Party leader pledged to get Canada's vaccination rate above 90% by focusing on a national publicity campaign, paid time off, free transportation, and a national vaccination proof. He argued that this would appeal to the patriotism of Canadians, and said the election was primarily a pandemic election.

Story 4: Chinese state media warned of retaliation if a Conservative government led by O'Toole adopts "unusually hostile" election promises regarding China.⁴⁶ The Conservative platform mentioned "China" 31 times, contained a section titled "Standing up to China's Aggression", and included plans to increase Canadian involvement in the Indo-Pacific by joining the Quadrilateral Security Dialogue. After the release of the platform, Chinese state-media stated that if "hawkish words were put into action" then "Ottawa will be the one to suffer."

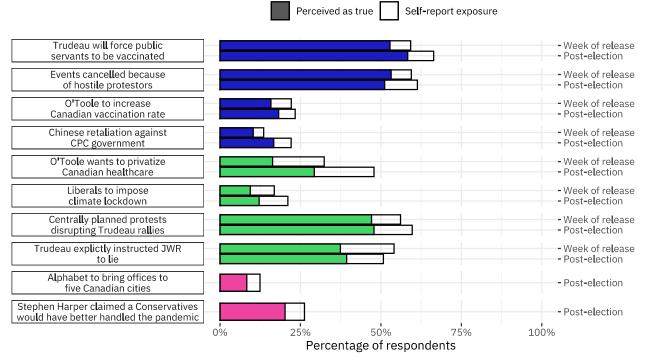
Fabricated stories

As recall of particular news items can be subject to a variety of biases⁴⁷, we asked about two completely fabricated stories that nevertheless sounded plausible in the post-election survey. These stories support the evaluation of accuracy of recall and truthfulness among survey respondents. They included: 1) Justin Trudeau announced a major partnership with Alphabet, Google's parent company, to bring offices for the tech giant to five Canadian cities; and 2) Former Prime Minister Stephen Harper criticized the Liberal government's response to COVID-19 and claimed a Conservative government would have better handled the pandemic.

Exposure and perceived truthfulness

Figure 5 shows the main results of this story-based investigation. The first four stories are factually accurate stories (in blue), the next four stories contain misinformation (in green), and the bottom two stories are fabricated by the research team to gain insight into how Canadians respond to questions about specific stories (in pink). The full white bar shows the percentage of Canadians who reported seeing, hearing, or reading about the story while the shorter colored bars show the percentage of Canadians who perceived the story as being "probably true" or "definitely true" (among those who have heard about the story). Each story has two bars, with the top bar being the results of the survey held during the campaign and the bottom bar representing the results from the post-election survey.

Figure 5: Percentage of Canadians reporting exposure to and truthfulness of stories that emerged during the campaign, measured both during and after the election



Means based on between 1429 and 2580 observations per story from the pre-election survey and 2576 observations from the post-election survey. Bars show the percentage of respondents who report seeing the story, with the inside colored bar showing the percentage of respondents who believe the story to be true. We did not find large differences in exposure to the true and false stories shared during the campaign. For instance, a similar percentage of Canadians reported that they had heard about O'Toole wanting to privatize the Canadian healthcare system (false) and Liberal events being canceled due to hostile protests (true). During the campaign, an average of 37% of respondents reported being exposed to the factual stories, whereas exposure to the four misinformation stories averaged 40%. There was a slight increase in reported exposure by post-election survey respondents, with an average of 43% indicating they had seen the factually true stories and 45% the misinformation stories. Twenty percent of respondents claimed to have seen the fabricated stories — those that sounded plausible but did not exist. ⁴⁸

Conditional upon exposure to the story, factual stories were perceived as more truthful than misinformation stories both during the election (82% versus 65%) and post-election (81% versus 69%). The fabricated stories fell in between, with 72% of those indicating they had seen the story claiming that it was probably or definitely true. Across all stories, however, a majority of those who had seen or heard about a story believed it was true. Even the outlandish claim about the Liberal climate lockdown story was believed by 56% of those who reported seeing, hearing, or reading about the story. While exposure might increase the likelihood of believing that a story is true, exposure to the stories might also be driven by citizens' predispositions, with those denying the existence of climate change being more likely to be exposed to the climate lockdown story, for example.

There was also variation within the story categories (misinformation, truthful, and fabricated). The misinformation stories close to the truth were reported as widely seen and truthful for many Canadians. For example, the claim that the protests disrupting Trudeau's campaign events were part of a centralized operation that aims to prevent the Liberals from campaigning in key ridings is close to the reality that many events were disrupted by hostile protestors who coordinated, at least in part, on private chat applications.⁴⁹ The measures of exposure and truthfulness of this claim were close to that of the truth that events had been canceled or postponed (60% versus 56% for exposure, and 90% versus 84% for perceived truthfulness among those who indicated exposure). The numbers were similarly high for the story that Trudeau instructed Jody Wilson-Raybould to lie. These findings are consistent with research showing that information containing a partial truth is perceived as more credible than completely false information.⁵⁰

There were also instances where significant media attention on pieces of misinformation led to it being more widely seen than factually true stories. For example, the false claim that Erin O'Toole wants to privatize the Canadian healthcare system was more widely seen than the factually accurate campaign promise to increase the vaccination rate of Canadians to 90%. As shown in Figure 7, this false claim was covered heavily in the press.

Of course, the differences in the number of Canadians who reported seeing these stories and believing them are partly a product of the stories selected. This research does suggest, however, that hearing of a story and believing in its truthfulness are only somewhat related to its factual accuracy. Misinformation that closely resembles the truth is likely to be widely seen and believed, while fringe misinformation that covers new ground is less likely to be seen and believed.

The stories we examined had a direct bearing upon the fortune of the two leading parties. Figure 6 shows the same measures, but compares Liberal and Conservative partisans. Here we see that exposure and truth perception is pretty similar for most stories, with the important exceptions of two misinformation incidents that had the potential to significantly impact the election result. The story Erin O'Toole wants to privatize the Canadian healthcare system was seen by approximately 45% of both Liberals and Conservatives. Only 40% of Conservatives exposed to the story believed it to be true, while 73% of Liberals did so. The story that Justin Trudeau explicitly instructed Jody Wilson-Raybould to lie about the SNC-Lavalinaffair was seen by 48% of Liberals and 68% of Conservatives, and of those who were exposed, 90% of Conservatives believed it to be true while only 56% of exposed Liberals believed it.

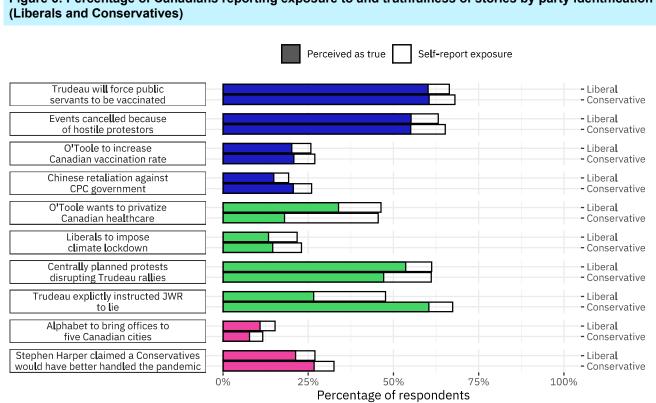


Figure 6: Percentage of Canadians reporting exposure to and truthfulness of stories by party identification

Means based on between 1516 and 2939 observations per story, with pre- and post-election samples merged. Bars show the percentage of respondents who report seeing the story, with the inside colored bar showing the percentage of respondents who believe the story to be true.

Misinformation discussion during the election

Generally, the incidents described above prompted few discussions, as measured by broadcast and social media attention, around misinformation more broadly, with the notable exception of the Freeland tweet claiming O'Toole wanted to privatize the Canadian healthcare system. Instead, discussion on misinformation was prominent in relation to lvermectin shortages and the claims that it was an effective therapeutic for COVID-19, and came up again with coverage of Trudeau accusing Rebel News of spreading mis- and disinformation after the Leaders' debate. Figure 7 shows the use of terms associated with misinformation across Twitter, broadcast media, and Reddit over the election period.

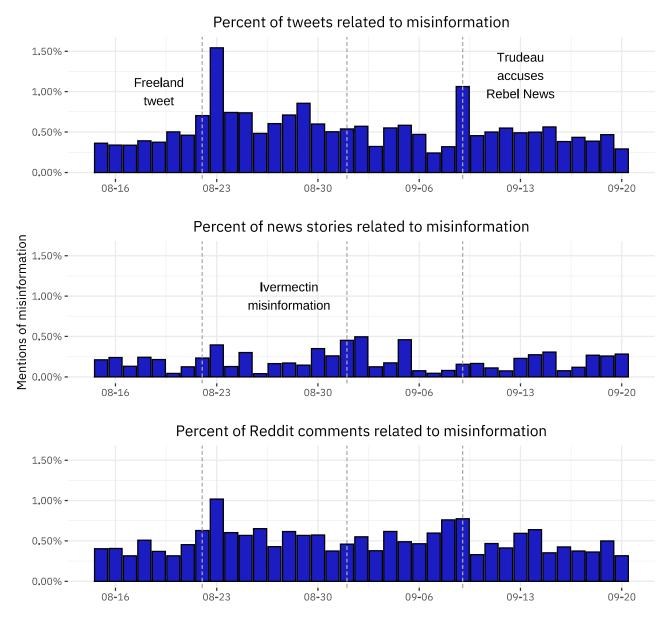
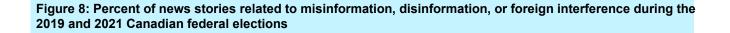


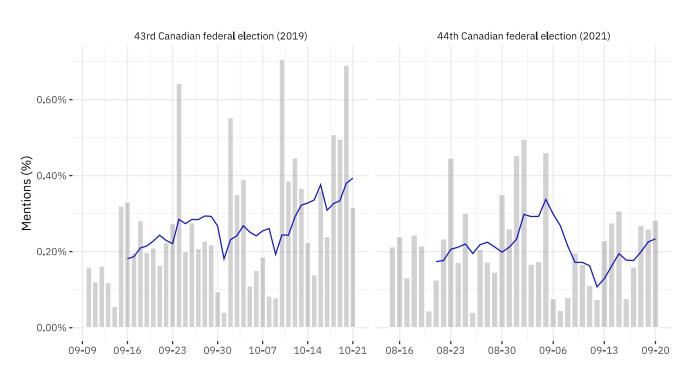
Figure 7: Mentions of misinformation-related terms on Twitter, Reddit, and broadcast media in Canada during the 2021 Canadian election.

Based on approximately 12 million tweets from 1.3 million accounts identified by Canadian politics keywords and hashtags, 79 thousand stories pulled from 87 Canadian media outlets that post articles to their Facebook pages collected using Facebook CrowdTangle API, and 870 thousand Reddit comments by 56 thousand users collected using the PushShift API. Dictionary available in the Appendix.

Figure 7 shows that, generally speaking, Twitter had the highest volume of discussion of misinformation, while broadcast media tended to avoid the topic. However, across all three media platforms examined, discussions of misinformation and disinformation did not feature prominently.

Using the data from broadcast media, we can compare the 2021 election to the one in 2019 to evaluate whether concerns about misinformation have become more or less important over time. Figure 8 shows the mentions of misinformation, disinformation, and foreign interference from the same set of news outlets posting articles on Facebook during both the 2019 and 2021 elections. Overall volume of misinformation-related discussion was higher in 2019 as compared to 2021, with coverage increasing over the election.





Percentage of news stories related to misinformation shown for each day of the 2019 and 2021 Canadian federal elections. The blue line represents the 7-day rolling average. Based on 166,420 Stories pulled from 159 Canadian media outlets that post articles to their Facebook page. Dictionary available in the Appendix.

04 Social media platforms

SUMMARY

- Misinformation related to the election and to COVID-19 was detected on all social media platforms examined.
- Despite more assertive moderation and election integrity policies, large social media platforms continued to be home to widespread misinformation. Users are finding innovative ways to avoid moderation such as using coded language (like intentional spelling mistakes), private and closed groups, multiple accounts, and opting to reduce their reach (e.g., by omitting hashtags).
- Many users are moving their political speech to niche social media platforms with less moderation.

The strong link between misinformation and social media has been well documented in recent years.⁵¹ Social media use has become more widespread and an increasing number of Canadians get their political information from social media. We examined the major social media platforms used for political discussion and news consumption in Canada and analyzed each platform.

Figure 9 (on the next page) shows which social media platforms are used in Canada, for any purpose (white bar) or specifically for political purposes (smaller green bar). Facebook is by far the most used social media platform (used by 79% of the population), followed by YouTube (61%), Twitter (35%), Reddit (14%), and TikTok (14%).⁵²

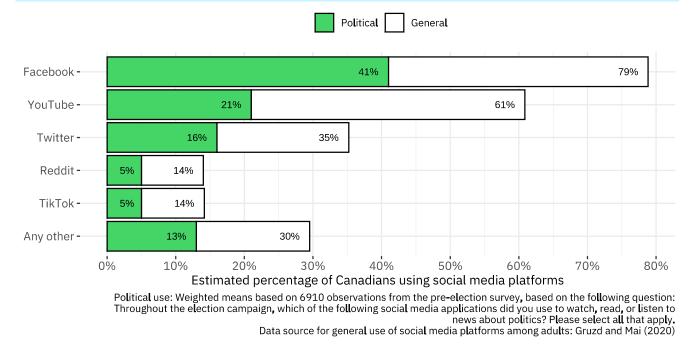


Figure 9: Use of social media platforms in general and for political information among Canadian adults

However, the percentage of users using the platforms for political purposes varies, with Facebook and Twitter representing the largest proportion of users utilizing the platform as a source of political news. About half of Facebook (52%) and Twitter (46%) users use the platform as a source of political information, while this proportion drops to 35% for other social media. Because of the greater total number of users in the country, YouTube is used more often than Twitter as a source of political information in absolute terms, but a greater proportion of Twitter users turn to the platform for political information. These three platforms have a greater importance as a vector of political news than others. Only a small percentage of Canadians (5%) use TikTok or Reddit as a source of political news.

The use of social media platforms for political information is dramatically different between young and older Canadians. For example, more than 60% of Canadians aged 18-34 report that they are using Facebook or Instagram as a source of political news, as compared to only 20% of those 65 or older. Younger Canadians are approximately four times more likely to use YouTube (33% for 18-34 years old Canadians as compared to about 8% of Canadians older than 65 years old) and TikTok (15% for Canadians aged 18-25 as compared to about 4% for those over 25 years old) for political news as compared to older Canadians.

In general, supporters of the People's Party of Canada and people who endorse COVID-19 or vote-related misinformation are also more likely to use social media platforms as a source of news. For example, 36% of those who identify as People's Party supporters in our sample use YouTube as a source of political information, compared to only 25% of self-identified Liberals, 22% of Conservatives, and 23% of NDP supporters.

Social media use is also strongly associated with whether individuals believed misinformation stories. Those who hold misperceptions are 23 percentage points more likely to use Facebook and 15.5 percentage points more likely to use YouTube as a source of political information, as compared to those who hold no misperceptions (see page 39 for a full discussion of COVID-19 misperceptions).

Mainstream social media platforms

Facebook is the preferred social media platform of many Canadians. Facebook's Election Integrity Initiative, updated for the 2021 Canadian federal election aims to protect candidates, manage the amount of political news seen by users, limit the spread of misinformation, and promote credible information. Facebook claims to keep misinformation off its applications using several different methods, most notably keyword-assisted and use-flagged human moderation. During the election, we studied a range of public and private Facebook groups and pages and found that in smaller groups, content moderation was done mostly by community moderators rather than Facebook fact-checkers. The stringency of community moderation varied widely, and in general, the comments on posts were moderated much less than original posts.

YouTube is the preferred video streaming platform in Canada and is also an important source of political information for many, particularly younger Canadians. YouTube'sPolitical integrity policy aims to reduce the amount of misinformation on the platform and, during COVID-19, it increased its moderation of COVID-19 and vaccine-related misinformation. We examined a range of channels and used keyword searches on YouTube and found political, election, and COVID-19 misinformation on the platform, both in videos and in the comments.

Twitter is the preferred microblogging social media platform in Canada and is widely used by politicians, political influencers, as well as journalists and media organizations. Twitter has a Civic integrity policy and implemented a number of specific initiatives for the 2021 Canadian federal election. Twitter claims to actively monitor and remove posts containing misinformation. Twitter also labels misleading content and suspends or bans users who violated its policies. Given the ability to access large amounts of Twitter data through Twitter's Application Programming Interface, we collected millions of accounts and a long list of election-related keywords and hashtags. Individuals included Canadian politicians, journalists, and political influencers, as well as Twitter users who identified their location as somewhere in Canada. We found election and COVID-19 misinformation regularly on the platform.





Reddit is a forum board consisting of tens of thousands of "subreddits" where communities form around a common interest. Canada has the highest per-capita concentration of users of Reddit globally, with numerous thematic and city-specific subreddits serving as key information hubs. Despite the fact that only about 5% of Canadians use Reddit for political information, the platform has historically been an important vector of misinformation. Reddit is moderated at the community level, using volunteer moderators rather than moderators from the company. This results in individual subreddits having vastly different moderation policies and practices. In the lead-up to the election, several moderators from the r/Alberta and r/Edmonton subreddits claimed that the number of posts containing COVID-19 misinformation has surged and became virtually unmanageable for community moderators. Volunteer moderators across numerous subreddits protested and demanded that Reddit more actively manage COVID-19 misinformation on the platform. COVID-19 misinformation is widely present on Reddit, with entire subreddits dedicated to propagating and reinforcing conspiratorial ideation, however, it is less present on the main Canadian political subreddits. Election-related misinformation on Reddit was minimal.

TikTok is one of the fastest-growing social media platforms in Canada. It is a video-based social network where users share very short clips (typically less than a minute in length). Few Canadian politicians use the platform. TikTok Canada endorsed the Canada Declaration on Election Integrity Online before the election, and we observed content being heavily monitored, with videos and comments deemed offensive, false, or sensitive in nature promptly removed or labeled. Misinformation on the platform was often related to COVID-19 and vaccinations.

Across these five moderated platforms, we observed a range of COVID-19 and election-related misinformation. However, the overall volume was low and tended to come from low-reach accounts and communities. We observed users adopting a variety of strategies to evade auto-moderation. These included the use of intentional misspellings, additional spaces, or coded language (e.g., using "v@ccine" instead of vaccine or using phonetic spellings), the creation of multiple accounts, the omission of hashtags or searchable keywords, and the use of closed or private groups.



HEARTBREAKING. A RI GGE D E LECT SHUN IN C AN ADA

24K views · 2 months ago 🖘

Niche social media platforms

Another increasingly adopted strategy, particularly by prominent misinformation-producing accounts and individuals, is to leave mainstream platforms for less moderated alternatives. These platforms include Rumble, Gab, Gettr, 4chan, Telegram, Odysee, Discord, Substack, Locals, and BitChute. These platforms tend to attract right-wing audiences concerned about moderation overreach and collusion between tech companies and government. Our research focused on 4chan, Telegram and WeChat, with some monitoring of other platforms mentioned.

4chan is an early image and text sharing platform that continues to enjoy popularity among a niche community. It is the fertile ground for the genesis of a large amount of internet subculture, thanks in large part to its free-for-all ethos and functionally non-existent moderation. It has a primarily American audience, but Canadian political discussion does also occur. While content that breaks the law, including child sexual abuse material, identity theft, and direct incitements to physical harassment or violence, is banned by the forum's moderation team, hate speech is regularly permitted. During the election, vitriol and racist invective was directed at multiple federal party leaders, and COVID-19 and election-related conspiracies were regularly shared and discussed on 4chan.

Telegram is an instant messaging service that has recently gained in popularity and is now used widely by a variety of Canadians, and particularly by extreme-right communities. Telegram moderation occurs at the channel or group level with volunteer administrators having full control over removing content and banning users. Canadian-focused Telegram channels were extremely active during the lead-up to the 2021 Canadian federal election. COVID-19 and Canadian political misinformation was widely present, with numerous channels and groups dedicated to propagating and reinforcing conspiratorial ideation. Telegram was where we consistently detected the most misinformation. ⁵³

WeChat is an instant messaging and social platform primarily used by the Chinese diaspora, with some suggesting that as many as one million Canadians use the platform. ⁵⁴ For those who consume political



information primarily in Simplified Chinese, WeChat is a critical information pathway. The platform is heavily moderated and discussions tend to stay away from Canadian political content. We studied several stories that appeared on WeChat during the campaign, some of which contained misinformation. See the Foreign interference section below for more details.

05 Issue misinformation

S U M M A R Y

- Vote-related misinformation was frequent, with many narratives imported from the 2020 U.S. presidential election. Most Canadians trust the election results and believe that the election was administered fairly. Only approximately 13% of Canadians believe there was some form of election fraud or manipulation.
- The campaign was characterized by vocal, and sometimes violent protests targeting Prime Minister Justin Trudeau's campaign events. Most Canadians condemned these protests, although those who held COVID-19 misperceptions or who were opposed to vaccine passports were more likely to support them.
- Belief in misinformation stories was divided along partisan lines, with Liberals far more likely to believe that O'Toole wanted to privatize healthcare.
- Relatively little attention was paid to climate change during the campaign. Some parties and candidates nevertheless spread misinformation about the level of scientific consensus over anthropogenic climate change and the Liberals' intent to impose a "climate lockdown."
- Indigenous issues did not feature prominently during the campaign. The misinformation circulating
 on these issues reflected misconceptions or racism towards Indigenous people and was usually
 shared by small accounts with little reach.
- The Taliban takeover of Afghanistan, which forced the rapid evacuation of Canadian citizens, Afghans, and other foreign nationals, received extensive media coverage at the beginning of the campaign. However, misinformation circulating on that issue did not gain much traction.

Heading into the fall election, we anticipated significant discussion on eight topics: healthcare, COVID-19, government spending and deficits, crime and security, climate change, social and economic inequalities, foreign affairs, and Indigenous issues. These topics tend to be highly polarized in Canadian politics, which makes them ripe targets for misinformation. We evaluated the importance of the above issues to the campaign using social and broadcast media indicators. Figure 10 shows content from Twitter, Reddit, and broadcast media classified into those eight topics.



Figure 10: Percentage of media coverage focused on a specific issue

Percentage of content containing topic-relevant keywords, shown as a rolling 7-day average. Based on 76900 stories (66461 English and 10439 French) pulled from 159 Canadian media outlets that post articles to their Facebook pages, 7933819 tweets from 734270 users, and 483239 Reddit comments from 36360 users. Approximately 39% of all news articles, 23% of tweets, and 21% of Reddit comments were classified using this approach (with content classified into multiple categories as applicable).

Across the three information sources examined, discussion during the campaign focused primarily on COVID-19, healthcare, and foreign affairs. Indigenous issues received the lowest amount of coverage. Broadcast media was far more likely to cover issues related to COVID-19, healthcare, and foreign affairs, while the two social media platforms hosted more discussions about climate change and government spending and deficits.

When asked which issues were important to them personally in the federal election, on a scale of zero to ten, zero being "not at all important" and ten being "very important", Canadians considered healthcare (8.1) and COVID-19 (7.5) to be the most important, whereas foreign affairs (6.1) and Indigenous issues (5.8) were considered the least important (see Figure 11). ⁵⁵

There were large differences across partisan lines. Most notably, COVID-19 was much less salient among People's Party supporters (4.8). Climate change, social and economic inequalities, and Indigenous issues tended to be perceived as more important among Liberal, NDP, Green, and Bloc Québécois supporters, while government spending and deficits were perceived as more important by Conservative, Bloc Québécois, and People's Party supporters.⁵⁶

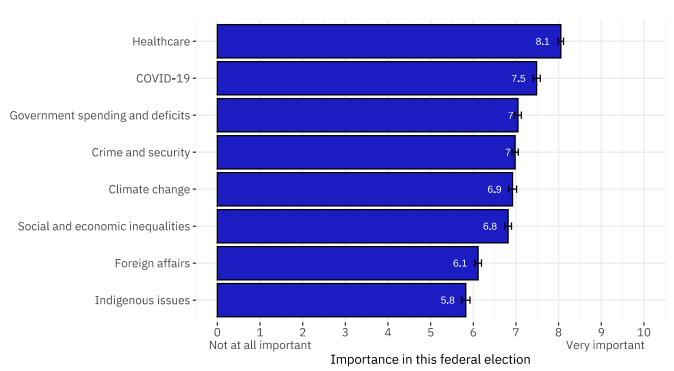
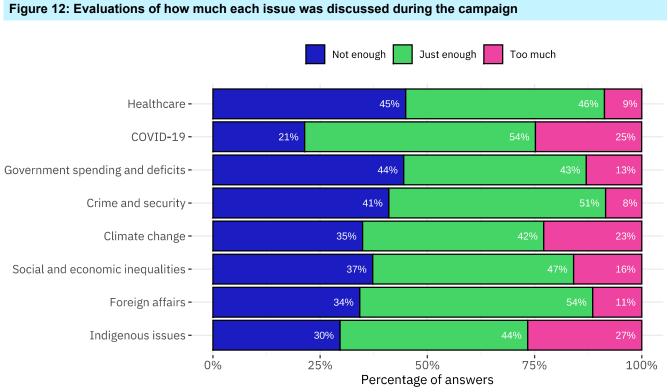


Figure 11: Importance of issues in the 2021 federal election

Weighted means based on pre-election survey data with sample sizes of around 3,250 observations, with 95% confidence intervals. Question: How important are the following issues to you personally in this federal election? Don't know answers are excluded.

Did Canadiansfeel like each issue was discussed too much, just enough, or not enough during the campaign? In the post-election survey, compared to other issues, few Canadians considered that COVID-19 was not discussed enough during the campaign (21% versus more than 30% for any other issue) while a similar percentage of Canadians considered that it was discussed too much (25%).

Surprisingly, as reported in Figure 12, Indigenous issues ranked first in terms of the issues that were perceived as being discussed too much despite this issue not being heavily discussed by mainstream media and on social media during the campaign (see Figure 10 for more details). These results are closely related to the importance placed by respondents on each issue, with Canadians believing that the federal government should take more actions to improve the lives of Indigenous people or to fight climate change being significantly more likely to report that Indigenous issues or climate change were not discussed enough during the campaign.



Weighted means based on post-election survey data with sample sizes of around 2,350 observations. Question: How much were the following issues discussed during the election campaign? Don't know answers are excluded.

Vote-related misinformation

Canadians have historically had high levels of trust in electoral institutions. ⁵⁷ However, given the events surrounding the 2020 U.S. election — including claims by Donald Trump that the election was rigged, there was mass vote fraud, and mail-in ballots were tampered with —vote-related misinformation is also circulating in Canada.

Mistrust in voting appears to be centered around mailin ballots. ⁵⁸ One Canadian 4chan user distilled this view when they wondered if the election would see Trudeau "pull a Biden and get 20 million mail-in votes." ⁵⁹ Distrust of mail-in ballots is compounded by the widespread sentiment in certain communities that ballot counters and poll workers are themselves involved in election fraud. Just before election day, People's Party Leader Maxime Bernier suggested that other parties would try to find reasons to reject PPC ballots and invited Canadian "patriots" to act as scrutineers to ensure the integrity



and fairness of the election, replicating a strategy used by Donald Trump in the 2020 U.S. election. 60

We found that more than a quarter of respondents (28%) believed voting by mail is less trustworthy than voting in person, while only a slim majority of respondents (55%) believed mail-in voting is equally trustworthy. Distrust was highest amongst supporters of the People's Party of Canada, among whom about two-thirds (66%) said they found voting by mail less trustworthy than voting in person, with only 20% finding those two options equally trustworthy. Supporters of the major parties tended to be more trusting of mail-in ballots; 67% of Liberal supporters, 62% of NDP supporters, 51% of BQ supporters, and 48% of Conservative supporters believed voting by mail is as trustworthy as voting in person.

Additionally, the reduction in polling stations in this election resulted in a flurry of online discussions about the claims that Elections Canada was attempting to suppress specific voters or to stop specific candidates from winning. This was a particularly popular theme with supporters of the People's Party. There were claims that candidates were removed from ballots - despite candidates not being on the party's official record — and that polls were misrepresenting the amount of support for the People's Party. PPC supporters who believed in a coming "Purple Wave" argued support for the party was being underreported. For example, various screenshots of a CTV Saskatoon online reader poll were taken out of context and shared as representative of the national level of support for the party (website-based polls are not representative of national vote intentions). Posts circulated in both British Columbia and Quebec that incorrectly claimed that Canadians who weren't fully vaccinated would be unable to enter polls to vote and encouraged unvaccinated Canadians to vote early.



Due to the overwhelming support for Maxime Bernier, leader of the PPC, CTV quickly removed the poll but not before a viewer could capture a screen shot.



Justin Trudeau	136	(6.%)
Erin O'Toole	650	(26 %)
Jagmeet Singh	116	(5 %)
Annamie Paul	19	(1.%)
Maxime Bernier	1542	(63 %)

The lack of polling stations was also noticed in remote Indigenous communities. Elections Canadaannounced an investigation to look into these reports, including, but not limited to, the notable absence of polling booths in the fly-in communities of Pikangikum, Poplar Hill, and Cat Lake in the Kenora riding⁶¹, where Indigenous NDP candidate Janine Seymour lost to incumbent Conservative MP Eric Melillo. In our post-election survey, we asked respondents if they believed that all eligible members of Indigenous communities who wanted to vote were able to do so; 63% responded yes, 15% responded no, and 23% didn't know.

There was also a lack of understanding among Canadians in how votes are counted in federal elections. An illustrative example concerns the role of Dominion voting machines, blamed by some for Donald Trump's loss in the 2020 U.S. Presidential election. We observed similar conspiracies in Canada suggesting that Elections Canada used such machines to count votes, when that is not the case. The belief that voting machines were used was associated with decreased confidence in the integrity of the federal election.

Only 30% of Canadians knew that all votes are counted by hand by Elections Canada officials, 13% incorrectly believed votes were counted only by machines, while 34% believed ballots were counted both by hand and by machine. Another 24% did not know how ballots are counted. This lack of knowledge invites the circulation of false information on this issue.

The density and cross-platform spread of vote-related misinformation is driving, at least in part, misperceptions and false beliefs. Partisan differences in intentions to use and place trust in mail-in ballots provide fertile ground for misinformation to thrive. We have seen this type of misinformation continue to circulate in the United States since the 2020 presidential election.

Given that, we monitored six YouTube livestreams, as well as a number of media pages on Facebook, Twitch, and Rumble (a rapidly growing video platform site that promises little moderation of political ideas) during election night to examine the type of misinformation spreading in the comment section as the election results were revealed. Mainstream media organizations like Radio-Canada and CBC had disabled user comments on their live streams. Vote fraud was a common theme in the comment sections on live streams of alternative right-wing media (for example, a simple search for the word "rigged" in the Rebel News livestream comments yielded more than 1,000 results on election night alone), even when those hosting the livestreams themselves denied the existence of mass vote fraud.⁶²





Despite this misinformation, Canadians in general have relatively high levels of trust in the way elections are administered in Canada. We find that 80% of Canadians believed that Elections Canada ran the election very fairly or somewhat fairly, about 70% trusted the election results, and about 70% believed that the election was administered fairly and the votes were counted accurately. It is important to note, however, that these percentages are slightly lower than those observed in previous Canadian elections.⁶³ Also, these percentages are much lower among those who do not trust mail-in ballots. For example, only a slight majority (54%) of respondents who believe that voting by mail is not as trustworthy as voting in person (or are unsure about it) indicated that they trusted the 2021 election result.

COVID-19 misinformation

The Canadian federal election was called on Aug. 15, only three days after Dr. Theresa Tam, the chief public health officer of Canada, declared that a fourth wave of COVID-19 was underway.⁶⁴ COVID-19 mis- and disinformation became an important element throughout the campaign, with tangible effects on election coverage and political party messaging.

In the mid-part of the election, Prime Minister Justin Trudeau was being followed from campaign stop to campaign stop by angry, and at times, violent crowds. These protesters were upset at COVID-19 restrictions and vaccinations broadly, and were driven largely by mis- and disinformation. Things reached a crescendo on September 6 in London, Ontario, when stones were thrown at Trudeau, which missed the prime minister and instead hit a group of media standing nearby. One man, a then local PPC riding official, was charged with assault with a weapon and fired from his position within the PPC related to the incident. ⁶⁵

For several days, these protests became the central focus of the campaign, garnering attention — both positive and negative — across social and mainstream media. It also gave the Liberal campaign an opportunity to pivot directly to using vaccination policies and mandates as a campaign issue.

These protesters represent only a sliver of Canadians' opinion on vaccination policies. A large majority of Canadians support vaccine passports (70%) and stronger federal intervention to stop the spread of variants (68%). Still, beliefs in COVID-19 misinformation provided insight into the base of support for different parties, in particular the People's Party of Canada.

Canadians were asked during the campaign to evaluate the perceived truthfulness of five false COVID-19 statements on a five-point scale ranging from "definitely false" to "definitely true." ⁶⁶ As reported in Figure 13, these false statements were each endorsed by more than 15% of respondents. ⁶⁷

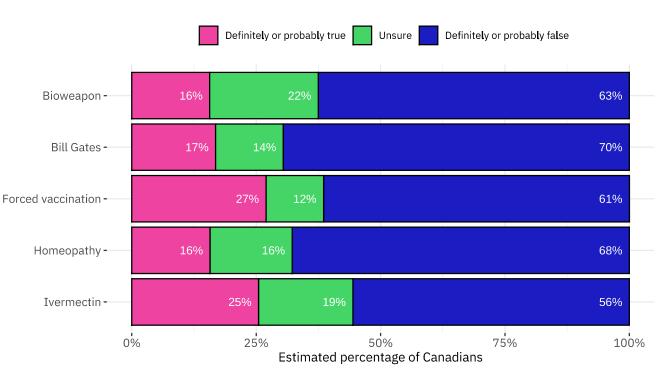


Figure 13: Perceived truthfulness of false COVID-19 statements

Weighted means based on 6910 observations from the pre-election survey.

The question included five response categories: definitely true, probably true, probably false, definitely false, and unsure.

Being certain that the five statements are true was associated with a 10.8 percentage point increase in vote intentions for the People's Party of Canada during the campaign. In fact, as Figure 14 illustrates, positions on COVID-19 were strongly associated with support for the PPCin this election. Respondents who thought governments should act more to reduce the spread of COVID-19 were 13 percentage points less likely to have also indicated that they would vote for the PPC, as compared to those who disagreed with that statement.⁶⁸

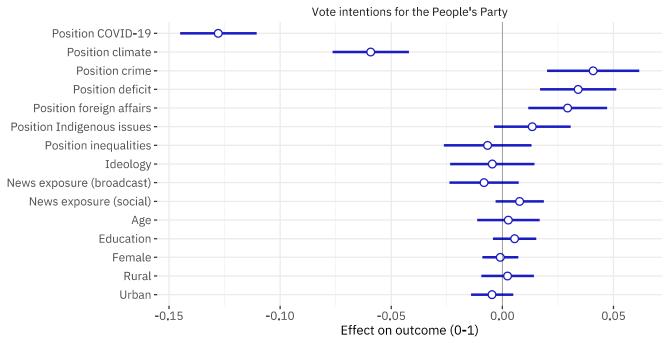


Figure 14: Influence of COVID-19 issue positions on vote intentions for the People's Party of Canada

OLS regression coefficients shown with 95% confidence intervals. Based on pre-election survey with sample size of 6910 respondents. All variables are measured on 0-1 scales. Regional fixed effects not plotted. An estimate below zero means that the variable has a negative impact on vote intentions for the PPC, whereas an estimate above zero means that it has a positive impact.

Those who held COVID-19 misperceptions, subscribed to conspiracy theories, or opposed vaccine passports were significantly more likely to participate in protests or demonstrations of any nature during the election, support the anti-vaccine passport protests, and react positively to these protests. While disgust (38%) or anger (26%) were the most common reaction from respondents to the protests, there was a non-negligible proportion of Canadians who reacted positively. For example, nine percent of respondents indicated feeling amusement, and seven percent indicated feeling happiness toward hostile protests disrupting Liberal campaign events. Those who reacted positively to the protests were twice as likely to hold COVID-19 misperceptions as compared to those who did not.

As these protests escalated, Liberal Leader Justin Trudeau adopted a more aggressive tone against those who refused to get vaccinated against COVID-19 and those who spread COVID-19 misinformation. In the media scrum following the official French-language leaders' debate, Trudeau answered a question from Rebel News, a media organization that was previously denied accreditation to question the leaders, by saying that right-wing organizations like Rebel News that spread misinformation about science and vaccines need to take accountability for the polarization of views towards the pandemic in Canada.⁶⁹

We asked Canadians about this incident in the following days and found only 18% of Canadians had heard about the incident between Trudeau and the Rebel News journalist. Of those who were familiar with the incident, 39% agreed that alternative media organizations like Rebel News deserve most of the blame for the polarization on COVID-19 and vaccines (16% disagreed and 44% were neutral or did not know). In comparison, 30% agreed that the Liberal Party deserves most of the blame for this polarization (35% disagreed and 35% were neutral or did not know).

O'Toole privatizing healthcare

Finance Minister and Deputy Prime Minister Chrystia Freeland tweeted a deceptively edited video which was then flagged as "manipulated media" by Twitter. Due to Freeland's political prominence, it was the most visible instance of misinformation in the 2021 election. Almost a third (32.6%) of Canadians reported seeing the story during the week after it was released and close to half (47%) indicated that they had heard about this story after the election. Among the Canadians we surveyed, 60% heard about the claims that O'Toole supported the privatization of healthcare through broadcast news sources, while only a small percentage (10%) saw it through Twitter itself.

While the story of the labeled tweet fell out of the media coverage after the early part of the campaign, it had far-reaching implications. During the leaders' debates and at press conferences, Conservative Leader Erin O'Toole was asked about his views on privatizing healthcare. O'Toole's answers only added to the intrigue surrounding the story.

Our survey shows that Canadians were divided on whether it is true that O'Toole wants to privatize Canadian healthcare. Half of the people tended to believe the misinformation contained within Freeland's tweet was true (51%), more than those who believed it was false (41%) or those who were unsure (9%). Belief in the story increased during the campaign, with the percentage of people believing that the story is true was higher in the post-election period (63%) than it was during the campaign (51%).

Belief in the misinformation contained within the tweet broke down most starkly on partisan lines. In the week following the publication of the tweet, almost three-quarters (73%) of self-identified Liberals said they believed the misinformation within the tweet, while only 30% of Conservatives believed it.

The misinformation also tended to evoke strong emotions in people with anger (32%), disgust (24%), fear (19%), and stress (18%) being the most common reactions. Only 18% felt neutral about it. Few respondents reported feeling happy (6%), amused (6%), or calm (6%) about the story.

Part of what made the tweet so newsworthy was the decision by Twitter to add a label explicitly describing it as manipulated media, which was broadly interpreted as misinformation. This may have set a tone for the rest of the campaign, showing participants of all political stripes where exactly the social media company would draw the line. No other tweets by candidates or parties were labeled as misinformation for the remainder of the campaign.⁷⁰

The misinformation also fed into other misinformation, as social media users used the fact a Twitter executive once worked for the Conservative Party as reason to believe the misinformation label was attached to Freeland's tweet as a deliberate ploy to assist the Conservatives in the election.

Former Conservative Party Staffer

Is a Senior Executive at TWITTER Canada

PLEASE RETWEET AND SHARE

#cdnpoli #elxn44

11:12 PM · Aug 22, 2021 · Twitter Web App

324 Retweets 42 Quote Tweets 351 Likes

Climate change

Climate change was poised to be a top issue during the election. In early August, the International Panel on Climate Change (IPCC) released an updated assessment report, Code Red for Humanity⁷¹. In July, western Canada experienced record-breaking heat waves, causing hundreds of deaths and the burning of the small town of Lytton, British Columbia.

Media organizations shared high-quality analyses of each party's approach to greenhouse gas emission reductions by experts, similar to their approach in the 2019 federal election.⁷² New this election was the increased credibility the Conservatives brought toward reaching their emission reduction targets, given an independently reviewed plan to meet their stated emission targets.⁷³ This shifted some attention to more granular differences between the approaches of the major parties to carbon pricing and revenue recycling. Parties criticized each other over differing climate targets ranging from 30% to 60% reductions of 2005 emission levels by 2030. The Liberal government ratched up their original Paris target in the year before the election and used this increased ambition to distinguish themselves from the Conservatives. However, this top-level target distinction often failed to make waves in online discussions over each party's climate policy, as much of the conversation focused on credibility to follow through on plans, including the Liberal Party's track record. This issue was highlighted during the official leaders' debates where a significant amount of time was devoted to climate change policies, targets, and ability to meet them. ⁷⁴

Despite the salience of these issues, the volume of online misinformation relating to climate change remained low. Where present, misinformation regarding climate change was often used to justify inaction. For example, while no party formally denied the existence of climate change, the People's Party platform stated that there is "no scientific consensus on the theory that CO2 produced by human activity is causing dangerous global warming today or will in the future."⁷⁵

Even with some remaining climate skeptics, Canadians believe that climate change is real and presently happening. Nearly two-thirds (61%) of Canadians are "very sure" or "extremely sure" that climate change is happening, 25% are "somewhat sure", while 14% are "not at all sure". There are, however, significant partisan differences in climate beliefs. Between 69% and 73% of Liberal, NDP, Green, and Bloc Quebecois supporters are "very sure" or "extremely sure" that climate change is happening, compared to 42% of Conservative and 28% of People's Party supporters. Respectively, 21% of Conservatives and 48% of People's Party partisans are "not at all sure" climate change is happening.

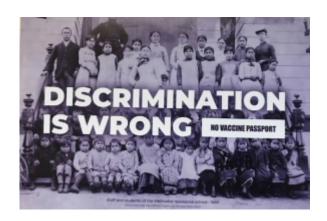
A notable story that resurfaced during the campaign, and which included climate-related misinformation, involved Conservative member of Parliament Cheryl Gallant sharing pamphlets and a previously published YouTube video which invoked the threat of so-called "climate lockdowns⁷⁶." Gallant claimed that COVID-style public health measures that shut down businesses and limited freedom of movement would be applied in similar fashion in response to climate change, given how many governments have issued formal declarations of climate emergencies. This claim was made based on no evidence or indication from any party during or prior to the campaign. This misinformation has been present in online spaces such as Gettr and Twitter since at least December 2020. Of those surveyed, 17% heard of this story in the week following its publication, with 56% believing it was true. The Conservative Party formally asked Gallant to remove the YouTube video, perhaps stifling potential further exposure to the issue, as only a small group (20%) of survey respondents remembered seeing this story after the election.



Indigenous Issues

Over the summer prior to the election, one issue that captured Canadian media attention was the revelation of thousands of unmarked children's graves on the grounds of former residential schools. This ongoing revelation prompted discussion on many issues involving Indigenous rights like #Landback and the many unsolved cases of missing and murdered Indigenous women and girls (MMIWG).

Despite the discussion of the summer months, there was a general lack of interest and coverage of these issues during the election period in broadcast media, on Twitter and on Reddit (see Figure 10 above).



Numerous well-known Indigenous people made statements encouraging voters to let these issues guide their decisions. For example, Cindy Blackstock, notable academic and Executive Director of the First Nations Child and Family Caring Society of Canada, gave numerous statements signaling to Canadians how to vote on these issues.⁷⁷ Notably, Indigenous issues and reconciliation were featured in the leaders' debates, and in particular, access to clean drinking water on reserves.

There were a few stories of misinformation circulating about the mass graves and residential schools, but they were posted by relatively small accounts with little reach. The majority of these included vitriolic racism or misconceptions about Indigenous people. We also observed a flyer authorized by a PPCcandidate that included an image of students from a residential school, stating "Discrimination is wrong. No vaccine passport". The comparison of the forced assimilation and child abuse of the residential school system with a public safety and health tool that is a non-starter.

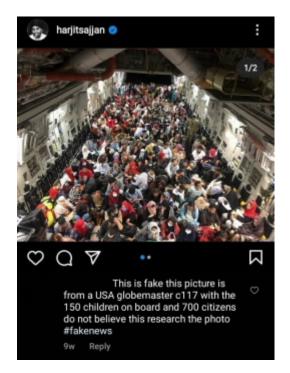
Foreign affairs

Although foreign affairs is usually not the most salient issue in Canadian elections ⁷⁸, the U.S. withdrawal from Afghanistan —forcing the rapid evacuation of Canadian citizens, Afghans and other foreign nationals —was prominent in the news in the campaign's early days. The uncertainty surrounding the situation was expected to breed misinformation. As further detailed on page 62, Canada's relationship with China was also salient during the campaign, with Michael Spavor being sentenced to 11 years in prison only a few days before the election was called. ⁷⁹

During the campaign, 55% of Canadians believed that Canada should adopt a harder line in its foreign affairs with countries like China, Afghanistan, and Russia. Despite their preference for a hawkish approach, only 34% of Canadians believed foreign affairs were not discussed enough during the campaign, while 54% said they discussed just enough and 11% said they were discussed too much.

The withdrawal from Afghanistan caused a lot of discussions on social media. However, conversations were not directly related to the election, with users simply expressing their opinions on the withdrawal. Many comments directly addressed Prime Minister Justin Trudeau, but even the most polarized ones did not appear to contain misinformation.

One notable exception is when Defence Minister Harjit Sajjan posted a photo of a Canadian evacuation flight on August 24. Despite his caption implying that it was a Royal Canadian Air Force aircraft, some users incorrectly commented that the picture was in fact showing a United States Air Force aircraft. One such comment on Instagram used the #fakenews hashtag. None of these comments gained traction on social media.



On August 25, Liberal member of Parliament Maryam Monsef referred to the Taliban as "our brothers" during a remote press conference.⁸⁰ We monitored these discussions for misinformation. This event spurred many negative comments directed towards her and the Liberal Party, but we did not identify commentary or social media posts that both contained misinformation and gained a significant amount of attention.

Toward the end of the campaign period, on September 14, a Globe and Mail story ran about Trudeau's memoir being printed by a Chinese state-owned publisher.⁸¹ The reporter who wrote the story, Robert Fife, shared the story on his personal Twitter account, and numerous comments accusing him of writing "another hit job" ensued, suggesting he had a Conservative-leaning political bias. Some on social media suggested that Fife is in cahoots with the Thompson family (who owns The Globe and Mail) and with several Chinese companies. The engagement on these comments was limited and there is no indicator of them gaining traction or spreading to different platforms.

	tFife hiding, what part does he play in the Thompson ee puzzle" of hiding money and influence to dictate
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06 Misinformation among Canadian groups

SUMMARY

- The character, content, and reach of misinformation among different politically important groups varied. While COVID-19 misperceptions and vote-related misinformation tended to be observed together, this was not true for every community examined.
- On average, French-speaking Canadians held fewer misperceptions and were less likely to have been exposed to misinformation stories. This is especially true for small misinformation incidents that remained relatively isolated from the broader information ecosystem.
- We observed COVID-19 conspiracies as well as U.S.-based misinformation concerning vote integrity circulating in rural communities on Facebook. Our investigation suggests that individuals sharing this information consume a large quantity of U.S. right-wing news.
- We found that racialized communities were more likely to hold COVID-19 misperceptions but were not more susceptible to vote-related misinformation.
- While lower trust toward government and medical institutions may contribute to making Indigenous communities more vulnerable to COVID-19 misinformation, we did not observe significant political misinformation circulating among Indigenous communities during the election.
- We also found few instances of mis- and disinformation spreading among South Asian communities during the election. Misleading and racist commentary targeted these communities, but it tended to be spread by small online accounts and received little engagement.

In addition to the issues described above, the Project investigated information circulating in select communities. Scholars have identified that those with lower digital literacy are more vulnerable to misinformation. ⁸² In the Canadian context, there are also rich minority-language information ecosystems that include community papers, social media channels and groups, and readership of international non-English or French media. This could also contribute to a variation in misinformation exposure and acceptance among different cultural communities.

Here, we highlight French-speaking communities, rural communities and minority communities, with a particular focus on Indigenous and South Asian communities. The French-speaking community is of particular interest because French is the first official language spoken by more than 20% of the Canadian population and the majority language in Quebec. The Canadian information ecosystem is divided into English- and French-language subsystems, which might influence exposure to and beliefs in specific pieces of misinformation among French Canadians.

We paid attention to misinformation among rural communities because the rural-urban cleavage is increasingly influencing Canadian politics⁸³ and because rural identities have been associated with the distrust of experts and intellectuals⁸⁴, which is one of the strongest predictors of beliefs in misinformation.⁸⁵ We examined misinformation among Indigenous communities given their salience in Canadian politics and their comparatively low levels of trust in Canadian institutions which again, could increase susceptibility to misinformation.

Finally, South Asian communities constitute one of the largest minority groups in Canada, are generally very politically active, and were found to be particularly likely to share fake news in the 2020 U.S. presidential election. This is not an exhaustive list of political communities in Canada, however does contain communities that are either salient in the current Canadian political landscape and/or have documented vulnerability to misinformation.

French-speakers

Studies examining French- and English-language media coverage of different issues suggest that there is no clear French-English divide in issue salience (except for questions related to Quebec or national unity)⁸⁶ and there exists a pan-Canadian media agenda during elections.⁸⁷ Figure 15 shows the eight issue areas we examined in French-language and English-language media. While there are some differences between the two, the relative importance of the issues are roughly similar. For the majority of issues, the attention paid to that issue among French- and English-language also changed similarly over the course of the campaign. COVID-19 received more attention in English-language media, while French-language media focused more on issues of crime and security, and climate change (even if these issues received relatively low amounts of attention).

While issue coverage between the linguistic communities might have been similar, we have strong reason to believe misinformation exposure and acceptance will be different. Cultural proximity is an important determinant of media and information consumption behaviours, with citizens having a preference for culturally proximate news and content.⁸⁸ This should extend to misinformation exposure, with culturally foreign sources less likely to be perceived as credible. This is likely exacerbated in Canada, where the majority English-speaking population is highly exposed to U.S.-based information and media while the French-speaking population has comparatively less exposure.⁸⁹ The U.S.information environment has been found to be particularly rife with misinformation with regards to COVID-19. French-language speakers will likely be less exposed to this misinformation environment.

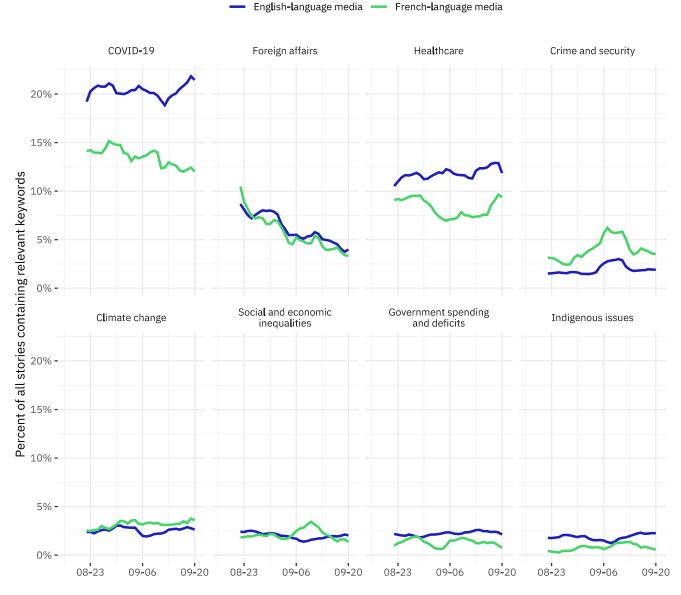


Figure 15: Media coverage of eight issues in French-language and English-language media

Percentage of content containing topic-relevant keywords, shown as a rolling 7-day average. Based on 76900 stories (66461 English and 10439 French) pulled from 159 Canadian media outlets that post articles to their Facebook pages. Approximately 39% of all articles were classified using this approach (with content classified into multiple categories as applicable).

We compared exposure and perceived truth of misinformation for French- and English-speaking respondents, with the results shown in Figure 16. The four stories a majority had seen showed comparable levels of exposure for English and French-language speakers. However, for the four stories that were the least widely viewed, French-language speakers were much less likely to have been exposed to the story at all when compared to their English counterparts. Stories that originate in English and are not top stories do not appear to reach many French-language Canadians, which may be indicative of a barrier between linguistic communities limiting the spread of misinformation.

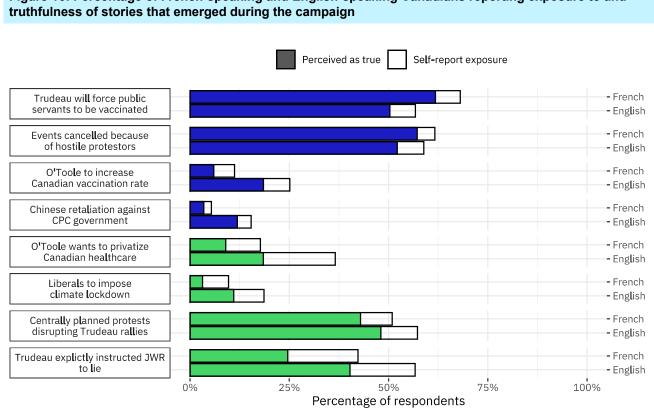


Figure 16: Percentage of French-speaking and English-speaking Canadians reporting exposure to and

Means based on between 274 and 3837 observations (pre-election survey) and 2576 observations from the post-election survey. Bars show the percentage of respondents who report seeing the story, with the inside colored bar showing the percentage of respondents who believe the story to be true.

For perceived truthfulness, Francophones were about as likely to perceive the true and false stories to be truthful. However, there is variance across items, with large differences observed for the false story about Prime Minister Justin Trudeau explicitly instructing then-justice minister Jody Wilson-Reybould to lie (71% for English Canadians versus 58% for French Canadians) and for the false story about the Liberals imposing a "climate lockdown" (59% for English Canadians versus only 32% for French Canadians). These results are partially driven by the partisanship differences we observed (more French-language respondents identify with the Liberal Party and fewer with the Conservative Party), however, it may be indicative of a barrier between linguistic communities where perceived truth is lower in the non-source community.

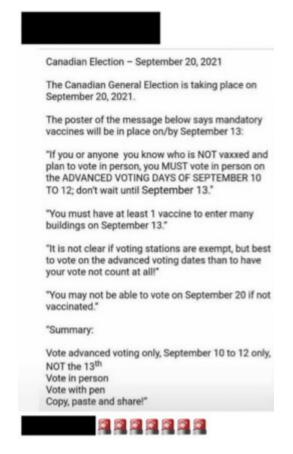
There are few differences between French speakers and English speakers⁹⁰ in terms of misinformation perceptions. English speakers (24%) were more likely than French speakers (19%) to report that they were exposed to misinformation during the campaign. This is consistent with our observational research. However, members of both language communities equally believe that misinformation was a problem during the election. They also are similarly likely to believe that misinformation poses a threat to Canadian democracy. polarizes Canadians, and threatens social cohesion. French speakers and English speakers seem to be susceptible to misinformation on different topics. For example, our survey shows that French-speaking Canadians are slightly less likely to hold COVID-19 misperceptions 91, equally likely to deny the existence of climate change, but are more likely to believe that voting by mail is not as trustworthy as voting in person. This suggests that there are different pieces of misinformation circulating in French-language communities and going forward, greater focus should be put on the French-language information ecosystem in Canada.

Rural populations

The politics of the urban-rural divide in Canada has become increasingly important to understanding the electoral outcomes in federal elections.⁹² Rural populations are distinct from their urban counterparts in how they engage with the internet and social media,⁹³ and that engagement is shown to affect civic engagement.⁹⁴ Rural areas are also typically more conservative than urban centres. By studying these online groups, we were able to see the way their political culture manifests online as well as the kinds of misinformation that are able to gain traction in smaller communities.

As previously shown in Figure 3, rural and urban Canadians⁹⁵ had similar levels of self-reported exposure to misinformation, but urban Canadians were slightly more likely to believe that misinformation was an important problem during the election ⁹⁶ and that misinformation threatens social cohesion and democracy. Rural Canadians were slightly more likely to hold COVID-19 misperceptions (59% believed that at least one of the false statements was true, as compared to 47% among urban Canadians), and less likely to believe that voting by mail is as trustworthy as voting in person (48%, compared to 59%).

The social media habits of rural Canadians are as diverse as rural Canadians themselves, causing high variation in the likelihood of being exposed to and accepting misinformation as fact. However, early on in the campaign, we identified Facebook as the key social media platform through which political information (and misinformation) circulated among rural Canadians. Misinformation was also often regional in nature. We observed more misinformation on politically oriented pages such as interest-group pages (for example gun-rights groups), especially those expressing high levels of political distrust, as compared to rural community pages. Anti-vaccine pages (and other pages sharing misinformation on COVID-19) sometimes included misinformation on the election.



For example, we observed warnings on social media that Canadians who were not vaccinated against COVID-19 would not be allowed into polls on election day. Posts circulating in British Columbia claimed that after Sept. 13 Canadians who weren't fully vaccinated would be unable to enter polls to vote, and encouraged unvaccinated Canadians to vote early. Similar posts circulated in Quebec.⁹⁷ Elections Canada didn't require voters (or poll workers) to be vaccinated in order to vote (or work) at the polls.⁹⁸

Rhetoric that rural Canadians used when spreading vote-related misinformation was clearly related to the rhetoric seen last year in the lead-up and aftermath of the 2020 U.S. presidential election. Users identified as rural Canadians referred to the election as "rigged" and named Dominion voting machines, which were at the centre of the claims of vote manipulation in the 2020 election in the U.S. While Elections Canada counts votes by hand, Canadians are not knowledgeable about how votes are counted (see the Vote-related misinformation section) and this uncertainty allowed discussions of electoral integrity to veer toward discussions of conspiratorial government malfeasance.

We observed a distinct pattern on Facebook where users posting misinformation tended to have information linkages with U.S.-based news sources and appeared to be drawing some of the content from south of the border. Once a Facebook user had been identified as posting misinformation, we examined their publicly liked pages, with many of those posting misinformation from less-reliable American news sources. This is consistent with findings elsewhere that US.-based misinformation is influential in Canada.⁹⁹

We observed significant variation in content moderation across rural community Facebook groups. In general, community groups (e.g. "what's happening in your area" pages) were more likely to moderate posts and delete them if they contained misinformation. They were also more likely to moderate comments which contained misinformation. Responses would come in the forms of warnings, corrections, deleted comments, or threats of repercussions for posting misinformation. In issue-specific pages (e.g., cultural preservation pages, gun-rights groups) the amount of moderation varied, including some pages with no evidence of moderation of either posts or comments.

Difference across ethnic and racial groups

We examined how different ethnic and racial groups might be exposed to mis- and disinformation using our digital ethnographic approach. At a high-level, our survey data can be used to understand whether different ethnic and racial groups had different levels of self-reported exposure to misinformation, were more likely to believe in COVID-19 misinformation, or had lower levels of trust in vote by mail. The results of the OLS regressions for self-identified ethnic groups are reported in Figure 17 when controlling for other socio-demographic characteristics (age, gender, education, region), partisan identification, and political interest. Ethnicity does not seem to be an important predictor of exposure to misinformation and trust in mail-in ballots, except for Indigenous people, who were more likely to report that they saw or heard misinformation during the campaign and were less likely to trust mail-in ballots.

However, ethnic and racial identities are a stronger predictor of COVID-19 misperceptions, with the average perceived truthfulness of the COVID-19 false statements being around 10 percentage points higher among Canadians who identify as Indigenous, Black, Arab, South Asian, and Southeast Asian respondents, and about five percentage points higher among respondents identifying as Asian as compared to Canadians who do not identify as a member of those groups. These results are consistent with those found in other countries during the COVID-19 pandemic and existing research on susceptibility to conspiracy theories, which suggest that colonial legacies or experiences of discrimination can increase distrust of government and health officials, vaccine hesitancy, and beliefs in conspiracy theories. ¹⁰⁰

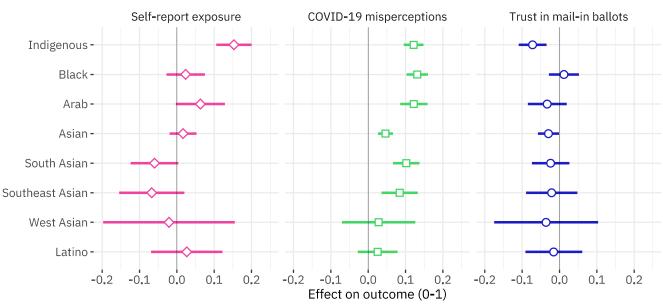


Figure 17: Self-reported exposure to misinformation, COVID-19 misperceptions, and trust in mail-in ballots among racialized communities

OLS regression coefficients shown with 95% confidence intervals. Models control for age, gender, education, region, partisan identification, political interest, and urban/rural identity.Sample sizes between 6225 and 6503 respondents. An estimate below zero means that the variable has a negative impact on the outcome, whereas an estimate above zero means that it has a positive impact.

During the campaign, we monitored the misinformation spreading among two specific groups: Indigenous communities, given their status as nations within Canada and their comparatively low levels of trust in Canadian institutions, and South Asian communities, which constitute a particularly politically active community in Canada and were found to be more likely to share fake news in the 2020 U.S. presidential election.¹⁰¹ We also detail misinformation among East Asians in the Disinformation and Foreign Influence section.

Indigenous communities

Previous studies suggest that lower trust towards government and medical institutions may contribute to making Indigenous communities more vulnerable to COVID-19 misinformation, and more hesitant towards vaccination. This vulnerability aggravates a legacy of harm caused by colonial and health care institutions that have traditionally targeted Indigenous communities.¹⁰² In the 2021 election, however, we did not observe significant political misinformation circulating among Indigenous communities.

We did observe accounts run by individuals claiming Indigenous identity who were opposed to vaccine mandates. One group offered "Clan membership" to anyone who was willing to support their cause and also created a petition addressed to the Governor General which states that the signatories no longer consent "to be governed by the corporation Canada."¹⁰³ Those few accounts we detected had relatively small followings. They typically used coded language that we see posted by other users spreading misinformation (e.g. the word jab to refer to COVID-19 vaccination). In one video, individuals used the phrase "jabba jabba" and expressed concern that the video would be removed if they used the word "vaccine." ¹⁰⁴

Our survey data suggest that members of Indigenous communities ¹⁰⁵ were consistently more likely to believe in COVID-19 falsehoods. In particular, the falsehood about forced vaccination was the most likely to be perceived as true by Indigenous respondents. However, this did not necessarily translate into opposition to vaccination, with Indigenous Canadians being as likely to support vaccine passports as non-Indigenous Canadians (approximately 70%).

Moving beyond misinformation, existing studies suggest Indigenous people have lower election participation rates in Canadian federal and provincial elections, in part because of the remoteness of Indigenous communities, the perceived illegitimacy of Canadian elections, or perceptions that not enough attention is paid to Indigenous issues.¹⁰⁶ Contributing to these perceptions were the barriers to voting for some in Indigenous communities. As explained in the Vote-related misinformation section, a lack of polling stations was noticed in remote Indigenous communities, including the fly-in communities of Pikangikum, Poplar Hill, and Cat Lake in the Kenora riding.¹⁰⁷ When asked, in our post-election survey, whether all eligible members of Indigenous communities who wanted to vote were able to do so, Indigenous respondents were significantly less likely to agree, with only 26% believing that all members of Indigenous communities were able to vote (54% disagree and 20% don't know), 12 percentage points higher than among non-Indigenous respondents.



I will not be voting because the Indigenous Hereditary systems will always be at odds with whoever thinks they have democratic jurisdiction on our unceded sovereign lands.

Instead, we will meet your chosen on the frontlines as per usual.



In our survey, we also included two questions asking respondents to rank the importance of Indigenous issues to themselves, and to average Canadians. In the responses to these questions, we saw that non-Indigenous respondents tended to evaluate the importance of these issues lower than Indigenous respondents. On average, Indigenous respondents ranked the importance of Indigenous issues in this election as 7.9/10, making it the second most important issue after healthcare (8.3/10) among Indigenous people. Conversely, non-Indigenous respondents ranked it substantially lower at 5.8/10 (the lowest rating of all issues). We also observed many Indigenous-identifying users expressing concern over participating in an election on unceded sovereign lands.

South Asian communities

The U.S. 2020 election saw polarizing debates among Asian Americans and an "uphill battle against online misinformation, notably within first-generation immigrant communities" ¹⁰⁸. Research conducted by misinformation watchdogs found that fake news ran particularly rampant among South and East Asian social media groups via WhatsApp and Facebook.

As South Asian Canadians are one of the largest minority groups in Canadacomposing 5.6% of the Canadian population and 25.1% of Canada's total visible minority population (as of 2016), we focused on South Asian Canadians, as a case study. Building on the data collection conducted in the United States, a similar methodology was followed to examine instances of misinformation in the South Asian-Canadian community on Twitter, Facebook, and YouTube.¹⁰⁹

Due to the diversity within the Asian American and Pacific Islander (AAPI) community, the platforms used by these communities vary greatly, making it difficult to track misinformation. ¹¹⁰ Further, misinformation that is spread within these communities often goes undetected as first-generation immigrants from these communities opt to consume media in their native languages. Misinformation written entirely in a non-English language tends to be underdetected or not detected at all by existing automated misinformationscreening algorithms.¹¹¹



Surprisingly (given the American case study), we found few instances of mis- and disinformation spreading among South Asian communities in Canada during the 2021 election. When instances of misinformation were found, they were from the previous, 2019 election cycle and primarily targeted towards NDP Leader Jagmeet Singh. As the first visible minority leader of a major party, Singh stands as a salient racialized politician in Canadian politics. Several articles or opinion pieces implying that Singh has ties with terrorism were published by Indian foreign media websites¹¹² and in Canadian media at the time. We saw several of those reposted during the 2021 election¹¹³. This notable decrease in misinformation among South Asian-Canadians could be explained by 2021 being the second election where Singh led the NDP in a national campaign.

Given that Sikh-Canadians constituted more than 5% of federal MPs after the 2019 election, mentions of Singh or other Sikh politicians were closely monitored for cases of false information spread by white or racialized people towards racialized politicians. Instances of this misleading information had racial undertones and were primarily found to be: spread by small accounts (either on Twitter or in YouTube/ Facebook comment sections) belonging to white Canadians; and unpopular, as there was little engagement on the comments or tweets themselves (as can be seen in the accompanying screen captures).

Overall, the lack of substantial misinformation speaks to the differences between South Asian Americans and South Asian Canadians. On Twitter, Facebook, and YouTube, information about Canadian elections is mostly factual and is typically a recounting of current events, translated into South Asian-native languages for a South Asian audience. Misleading information was occasionally found to be spread by small social media accounts belonging to white Canadians. However, these posts were few and far between, with little to no attention given to them, which provides insights into how visible minority politicians are perceived in 2021.

07 Disinformation and Foreign Influence

SUMMARY

- A majority of Canadians are somewhat or very confident that Canadian elections are free from foreign interference. Canadians believe that China is the country most likely to have interfered in the election.
- Canadians who self-identify with the Liberal Party and the NDP are significantly more likely to believe that our elections are safe from foreign interference than those who identify with the Conservative or People's Parties.
- Narratives from the United States were imported into the Canadian election, with a high degree of linguistic similarity around claims of election tampering.
- Chinese officials and state media commented on the election with an apparent aim to convince Canadians of Chinese origin to vote against the Conservative Party. Misleading information and information critical of certain candidates was found circulating on Chinese-language social media platforms. However, we find no evidence that Chinese interference had a significant impact on the overall election. We cannot fully discount the possibility that some riding-level contests were influenced.

Concerns over foreign interference and coordinated disinformation campaigns have been mounting in Canada, with both the Canadian Security Intelligence Service (CSIS) and Communications Security Establishment (CSE) highlighting risks of cyber foreign interference in the lead-up to the 2021 federal election.¹¹⁴ In this section, we first examine citizens' perception of foreign interference in Canada, including perceptions that China, Russia, the United States, and Iran interfered in the election. We then discuss the results of our monitoring of foreign interference during the campaign, with a particular focus on the U.S.and China.

Canadians tend to be relatively confident that our elections are safe from foreign interference. As shown in Figure 18, 12% are very confident, 43% are somewhat confident, while 26% are not very confident, and 9% are not at all confident that our elections are safe from foreign interference, 10% don't know.

Canadians who self-identify with the Liberal Party and the NDP are significantly more likely to believe that our elections are safe from foreign interference than those who identify with the Conservative Party or the People's Party. Canadians with higher levels of education and who frequently consume political news also tend to believe that our elections are safe from interference. On the other hand, women, francophones, and those who frequently consume political news on social media are less likely to believe that our elections are safe.

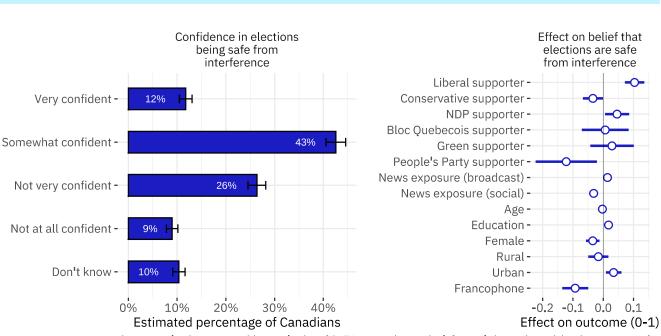


Figure 18: Confidence that Canadian elections are safe from foreign interference

Based on post-election survey with sample size of 2576 respondents. The left panel shows the weighted percentage of respondents by response categories to the following question: How confident are you that our elections are safe from foreign interference? The right panel shows OLS regression coefficients with 95% confidence intervals. Regional fixed effects not plotted. An estimate above zero means that the variable increases confidence in the safeness of our elections, whereas an estimate below zero means that it decreases confidence.

When asked how frequently foreign governments use propaganda to influence Canadian public opinion, respondents tend to choose the middle categories, i.e., not very frequently (27%) or quite frequently (31%) or indicate that they don't know (25%). Canadians are critical of foreign propaganda, with 78% considering that it is either quite harmful (38%) or very harmful (40%) for democracy. Less than 2% consider it to be not at all harmful for democracy.

In our post-election survey, we also asked Canadians whether they believe that specific countries (China, the United States, Russia, or Iran) interfered in the 2021 Canadian federal election.¹¹⁵ As reported in Figure 19, respondents believe that China (22%) and the United States (17%) are the most likely to have interfered, while foreign interference from Russia (13%) and Iran (8%) was perceived as less likely. About a third of Canadians (from 30% to 35%) reported that they don't know. Those who identify with the Conservative Party, the Bloc Quebecois, or the People's Party are more likely to believe that China interfered in the election. So too are men, and those who frequently consume political news (either on broadcast or social media).

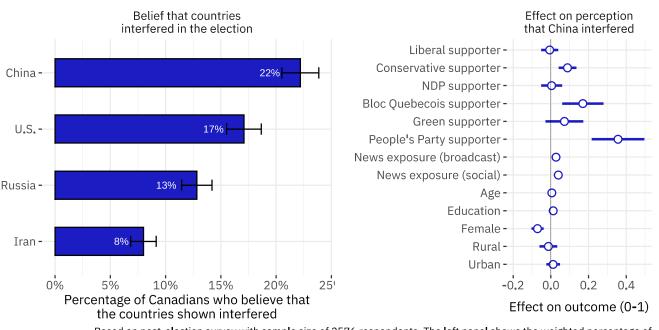


Figure 19: Perceptions that China interfered in the 2021 Canadian federal election

Based on post-election survey with sample size of 2576 respondents. The left panel shows the weighted percentage of respondents who believe that the countries shown interfered in the election. The right panel shows OLS regression coefficients with 95% confidence intervals. Regional fixed effects not plotted. An estimate above zero means that the variable increases perceptions that China interfered, whereas an estimate below zero means that it decreases perceptions that China interfered.

In our monitoring during the election, we observed interest in the Canadian election coming primarily from the United States and China. We did not find any evidence of Russian or other country interference. Note that the research team was limited by linguistic ability and monitoring did not include the Russian-language social media platform V Kontakte or Russian-language social media posts elsewhere. It is possible that the Russian-language community in Canada was subject to a low-scale campaign of Russian influence, but we saw no evidence of Russian interference in Canada in English or French.

United States

Canadian elections are rarely free from influence from the United States. Canadians consume a large amount of information originating in the U.S., and political events south of the border tend to be politically relevant in Canada. American politicians across the political spectrum also have a pattern of endorsing particular candidates in Canada and giving their opinion about Canadian political events or policies. Often, Canadian events are used as a foil or instrumentalized for political purposes in the United States.

In the most recent election, former U.S. president Barack Obama, as well as former secretary of state Hillary Clinton both endorsed the Liberals of Justin Trudeau, while U.S. Sen. Bernie Sanders endorsed the NDP of Jagmeet Singh. All three American politicians are popular among Canadians. For example, a large majority of Canadians (86%) would have voted for Obama in 2012 (the last election he contested)¹¹⁶, and about four-fifths of Canadians thought he was a good president when he left office in 2016. ¹¹⁷ Sanders and Clinton are also popular among Canadians.¹¹⁸

Ideas and cultural movements often come to Canada from the south. These can be tactics and policies, but also mis- and disinformation. ¹¹⁹ An elite-driven, mass-media-led process drove claims of voter fraud during the 2020 U.S. Presidential Election. ¹²⁰ Proponents argued that there was systematic mail-in voter fraud and ultimately claimed that former president Donald Trump was the true winner of the election. We found that this disinformation, often referred to as the "big lie," was reproduced during the Canadian election. See the vote-related misinformation subsection for more details.

Canadian-focused Telegram channels were active in sharing U.S. content from election audit support groups and pro-audit personalities—groups and individuals trying to find evidence of a non-existent plot to falsify election ballots and results. Mentions of Dominion voting systems were common, drawing directly from U.S. mis- and disinformation about election fraud. A series of images posted to a QAnon affiliated channel were intended to prove a connection between Trudeau and Dominion voting, and another Telegram message claimed Erin O'Toole used Dominion voting machines to gain the leadership of the Conservative Party of Canada.



Justin Trudeau votes online with Dominion Voting technology.

Telegram messages sent on election day also suggested the likelihood of election fraud taking place. We found similar claims of election fraud during live streams on election night coverage on YouTube, Twitch, Rumble, and Facebook. One individual claimed to have attended training for poll workers, and warned fellow channel members the paper ballots were not functioning properly, making vote tampering possible.

While not clearly containing statements of disinformation, many Telegram messages pushed the PPC as the only party committed to election integrity and implied that other Canadian political parties are either indifferent to or complicit in electoral fraud. The PPCinvited their partisans to act as election scrutineers to "protect our democracy" and prevent PPCballots from being unfairly rejected, using similar rhetoric to that used by Donald Trump after the 2020 presidential election. ¹²¹

In our survey, we asked respondents about how close Canada's ties with the United States should be. We find consistent relationships between perceptions that Canada's ties with the United States should be much closer and beliefs in misinformation, including beliefs in COVID-19 misinformation, that climate change is not happening, that mail-in-ballots are untrustworthy, and that the election was not administered fairly and the votes were not counted accurately. These relationships hold when controlling for ideology, trust in governments and the media, anti-intellectualism, media consumption, political interest, socio-demographics, and region of residence.

China

China has numerous geopolitical interests in Canada and a documented history of attempting to meddle in domestic affairs of other countries, including Canada. The 2021 Canadian federal election saw Chinese officials and state media commenting on the election with an apparent aim to convince Canadians of Chinese origin to vote against the Conservative Party, given the party's "hostile" platform towards China. We have documented these efforts and provide an evaluation of the extent to which we believe they were part of a campaign attempting to sway the results of the Canadian election. On Aug. 26, two weeks after the election was called, China's Ambassador to Canada, Cong Peiwu, shared comments with the Hill Times on the election. Ambassador Cong suggested that some Canadian politicians were prioritizing their "personal political relationships" with American counterparts over Canada-China diplomatic ties¹²² and "hyping issues related to China." Following the English-language federal leaders' debate on Sept. 9, Chinese state media outlet the Global Times responded by saying if a future Canadian government took hawkish actions against China, it would invite retaliation. These interventions raised significant concerns regarding the extent to which China may have meddled in the Canadian election. Moreover, some misinformation was circulated on WeChat among Chinese-language communities.

However, did Chinese state actors meaningfully interfere in the election on social media platforms in Canada? We find no clear evidence that there was a concerted effort by the Chinese state to interfere in the election. Moreover, we find Canadian-Chinese issues were not central to the campaign nor were they top of mind for voters. We judge there to have been little to no impact from these activities on the overall election result. We find no evidence of riding-specific impact, although cannot fully discount the possibility that misinformation and critical discourse of specific incumbent Members of Parliament may have had an influence in a small number of ridings with large Chinese-speaking populations.

Chinese-language social media

During the election, we searched for Canada-related content on China-based social media platforms such as WeChat, Douyin, Sina Weibo, and Tencent. In the early part of the campaign (Aug. 15 to Sept. 7), we did not identify any misinformation or major interest in the Canadian election circulating on these platforms. When Canadian politics was mentioned it was in relation to encouraging more participation among Chinese diaspora communities.

However, we found that interest in the Canadian election increased around the same time as the federal leaders' debates on Sept. 8 and 9. Notably, anti-Conservative mentions and articles increased, and a set of false or misleading claims and narratives emerged:

- the CPC would sever diplomatic relations with China once it takes power;
- CPC politicians were targeting Chinese Canadians for political gain. This narrative often equated criticism of the Chinese government to an attack against the Chinese-Canadian community;
- the CPCdoes not care about anti-Chinese discrimination in Canada because racism is not mentioned explicitly in the CPC platform;
- all ethnic Chinese with ties to China would be required to register as foreign agents, and their free speech would be curtailed.

保守党奥图尔称:一旦当选下届加总 理,先禁微信再打压华为!誓和中国 对抗到底!

Original CEIC 加信移民快讯 8/31



8月即将结束,距离联邦大选也越来越近了,四 大党派最近都在花式拉票。除了承诺继续发钱, 各党党魁还使出浑身解数来造舆论获取关注度。

保守党党魁奥图尔(Erin O'Toole)就把眼睛盯 上了中国。他可不是要和华人民众搞好关系,而 是扬言一旦当选,就誓与中国对抗到底! The prevalence of topics regarding the Canadian election on these Chinese-language platforms increased as election day approached, but the spread and reach of this information was low to moderate, and found to be largely confined to a single platform: WeChat. The content frequently asked Chinese-Canadian voters to review each candidate's background before voting and to vote carefully. We further documented content related to two specific ridings where incumbent MPs came under criticism.

Steveston—Richmond East

We observed misleading and false information directed at the former Conservative MP Kenny Chiu in the B.C. riding of Steveston-Richmond East, coming under criticism on Chineselanguage social media, and by the domestic Chinese-language press. Criticism against him included the assertion he did not care about issues of Canadian Chinese communities and actively engaged in activities detrimental to their interests. On election day, Chiu lost the seat with 33.5% of the vote to the Liberal candidate Parm Bains who received 42.5% of the vote. He attributed part of his defeat to Chinese disinformation operations on WeChat.

An article in the free Chinese-language news site Today Commercial News, titled "Conservative MP Kenny Chiu reintroduces Foreign Influence Registry Act to repress Chinese Canadian communities" might substantiate Chiu's accusation. This article was widely circulated on WeChat. It misleadingly suggests that Chiu intended to repress Chinese communities by introducing the Foreign Influence Registry Act. In fact, the bill had planned to impose an obligation on individuals acting on behalf of foreign governments and political organizations to file returns when they undertake specific actions with respect to public office holders-essentially another form of the federal lobbying registry However, the narrative of the article was the bill targeted mainland Chinese associations and would ultimately be harmful to economic and cultural ties between Canada and China. Many sources on Today Commercial News come directly from the Chinese state media People's Daily.

Chiu claimed after the election he was discredited by Chinese state actors, by being portrayed as against Chinese Canadians interests during the campaign. The article was mainly circulated on WeChat targeting Chinese speakers, but not widely shared on Facebook and Twitter. According to the 2016 census profile, Canadians whose mother tongue is either Cantonese or Mandarin account for nearly 40% of Steveston-Richmond East's population.¹²³



如果奧图尔成功当选下一任加拿大总理, 歧视华 人的事件能不飙升?!



Vancouver East

We also observed New Democratic Party MP Jenny Kwan was targeted by Beijing-friendly individuals and organizations in the riding of Vancouver East. Like Chiu, Kwan has been vocal in calling upon the Canadian government to take more direct action to respond to Beijing's persecution of Xinjiang's minority Muslim Uyghurs and their repression of Hong Kong's democratic movement. The pro-Beijing community leader, Fred Kwok—President of the Chinese Benevolent Association of Vancouver and Chair of the Greater Vancouver Chinese Cultural Center—posted messages on WeChat to advocate election for the Liberal candidate Josh Vander Vies. These messages show Kwok organized a free lunch for the Chinese Canadian community to meet with Vander Vies. On election day, Kwan was re-elected with 56.4% of the vote compared to 19.8% for Vander Vies.

Chinese stat-affiliated social media accounts

In addition to monitoring Chinese-language social media, we evaluated known Chinese state-affiliated social media accounts on Facebook and Twitter to assess the extent to which they were commenting and potentially influencing the election. We used a publicly available list of Twitter accounts labeled "China state-affiliated media" alongside the social media accounts of Chinese diplomatic missions in Canada, and then searched for corresponding Facebook pages, yielding a total of 29 Twitter accounts and 17 Facebook pages.

Of the 4,094 unique articles shared on these Facebook pages since the beginning of the election, only 33 (approximately 0.8 percent) mentioned Canada, the Canadian election or Canadian-Chinese issues. On Twitter, out of 32,317 tweets shared by Chinese state-media accounts, only 261 mentioned Canada, the Canadian election or Canadian-Chinese issues (again 0.8 percent). When Canada was referenced, it was almost always in relation to Huawei executive Meng Wanzhou and the cases of Michael Spavor and Michael Kovrig.

The Global Times launched a petition on Aug. 18 to demand Huawei executive Meng's immediate release in response to her 1,000th day of detention. The portal for the petition displayed a counter which continuously added signatures at a regular interval claiming to have collected nearly 15 million signatures. The petition was widely shared by Chinese state actors' accounts on social media but evoked very few interactions among Canadians. Some Canadian voices, such as the Green Party and the Communist Party of Canada, have also called for the release of Wanzhou, but again, none of those posts have been widely shared during the election.

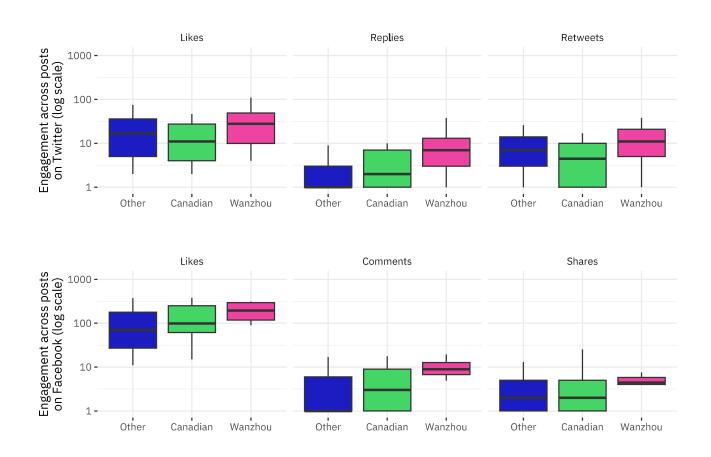
Chinese state media also published an article alleging that Spavor shared images of Chinese military equipment with Kovrig. This was shared on other Chinese stateaffiliated Twitter accounts. The resulting discussions were a continuation of the long-held Chinese view that the Michaels were rightfully imprisoned criminals.



illegally detained for 1,000 days

Wanzhou, Spavor, and Kovrig were repatriated to their respective countries shortly after the election. Figure 20 shows a boxplot of the distribution of likes, comments, and shares on Facebook and Twitter posts by Chinese state-affiliated social media accounts. The black bar indicates the median value, with the upper and lower ends of the bars showing the 25th and 75th percentile of posts, and the lines extending to the 10th and 90th percentiles. We find that, overall, Chinese state media tends to get far more interactions on Facebook. Posts concerning Canada got low engagement in general during the election period and do not observe significant differences in engagement between posts that mention Canada and posts on other topics. Posts mentioning Meng Wanzhou did get more engagement across all three measures. These results are not indicative of any artificial amplification.

Figure 20: Engagement on Facebook and Twitter posts by Chinese state-affiliated social media accounts during the 2021 Canadian federal election



Distribution of engagement with Chinese state media account content during the Canadian federal election. Based on 32317 tweets and 4094 unique Facebook posts from Chinese State media accounts from August 15 to September 20. Median, 10th, 25th, 75th, and 90th percentiles shown.

Another possible sign of amplification would be major differences between engagement of Canadianrelated content during the 2019 and 2021 federal elections. Figure 21 shows the distribution of likes, comments, and shares on Facebook posts by Chinese state-affiliated social media accounts during both those elections, again with median and percentiles shown. We again observe no substantive differences in engagement between Canada-related content and other content. There is a larger volume of likes for Wanzhou-related content, however.

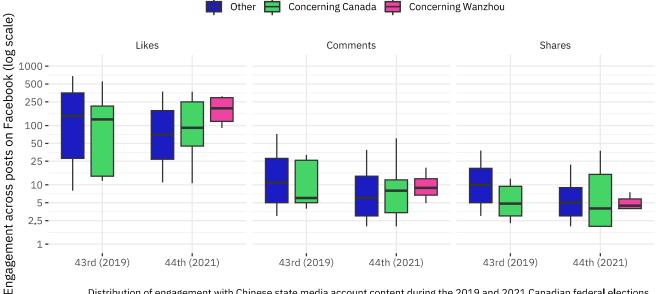


Figure 21: Engagement on Facebook posts by Chinese state-affiliated social media accounts during the 2019 and 2021 Canadian federal election

Distribution of engagement with Chinese state media account content during the 2019 and 2021 Canadian federal elections. Based on 7998 unique Facebook posts from Chinese state media accounts. Median, 10th, 25th, 75th, and 90th percentiles shown.

Of the three main English-language Chinese state media sources, Global Times was the most vocal in discussing the election. Xinhua summarized Canadian election debates and People's Daily primarily published Chinese perspectives about the Meng Wanzhou detainment. The Global Times published more articles, including accusations of CPCfear-mongering and hints of Chinese retaliation should the CPCbe elected and follow through with their campaign promises. The spread of these articles across Facebook and Twitter was minimal, although some have been shared by Chinese-Canadian citizen groups, and others by Canadian politicians and journalists. Overall, we find no evidence that content produced by these or other Chinese state media were amplified during the election and their limited spread appears organic.

Evaluating impact

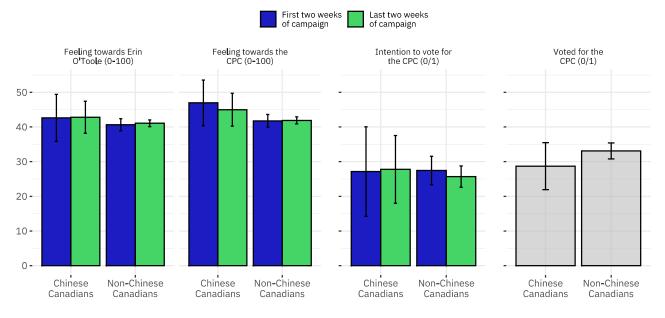
While we did not detect amplification of content coming from Chinese state-media outlets, the misinformation spread on Chinese-language social media is concerning. We judge this to be primarily organic and minimally resourced, however, cannot preclude the possibility of low-level interference efforts. Given this, we used survey and social media data to evaluate the extent to which there may have been an electoral impact.

The criticism was directed primarily at the Conservative Party and circulated primarily among Chinese Canadian communities. Global News reported the Conservative Party believed 13 ridings were targeted by foreign interference ¹²⁴ and observers ¹²⁵ have noted that the Conservatives lost several seats to the Liberals in the Greater Toronto and Greater Vancouver areas with a large proportion of ethnic Chinese voters. Among the five seats that the Conservatives lost to the Liberals, three (Markham—Unionville, Richmond Centre, and Steveston—Richmond East) have a very high concentration of Chinese Canadian voters.

If it is these Chinese Canadian voters who shifted against the Conservative Party, it should be detectable in

the survey data. We evaluated whether Chinese Canadians switched their vote intentions or changed their evaluations of the Conservative Party using survey data collected during the campaign and just after the election. We compared Chinese Canadians' vote intentions during the first two weeks of the campaign to their vote intentions during the last two weeks, with the results in Figure 22. The two left panels show that there was no change among Chinese Canadians from the first two weeks to the last two weeks for overall evaluation of either the Conservative Party of Canada or Erin O'Toole specifically. The third panel shows that there was no shift in intention to vote for the CPCamong Chinese Canadians between those surveyed during the first two weeks and those surveyed during the last two weeks of the campaign. The far right panel shows self-reported vote for the Conservative Party among Chinese Canadians which closely resembles stated vote intention in the pre-election period.

Figure 22: Changes in feelings towards and vote intentions for the Conservative Party between the first and last two weeks of the campaign



Unweighted means and 95% confidence intervals shown. Two left panels based on a sample of 689 Chinese Canadians and 18,905 non Chinese Canadians taken from the Canadian Election Study 2021. Two right panels based on a sample of 488 Chinese Canadians and 4737 non Chinese Canadians taken from Canadian Election Misinformation Project survey.

These survey data provide some evidence that Chinese Canadians did not move away from the Conservative Party during the campaign. We also did not find evidence that those using WeChat for political information were less likely to support the Conservative Party or that using WeChathad a different impact on East Asians than other Canadians, although we have only a small number of respondents who reported using WeChat.

We also examined whether or not issues of importance for the Canada-Chinese relationship were of broad interest during the election campaign. Figure 23 shows China-related discussion across Canadian broadcast media, Reddit, and Twitter. We find that the overall discussion of China across Canadian media was lower during the election period than both the before- and after-periods and was overall at a low level.

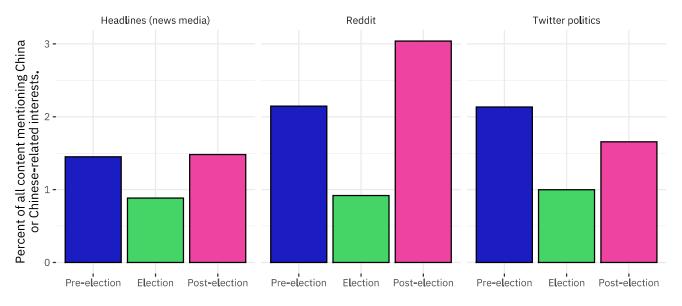


Figure 23: Percent of content mentioning China or Chinese-Canadian issues across Canadian broadcast and social media before, during, and after the election

Percentage of content mentioning China or Chinese-related issues. Based on 194,100 articles pulled from Facebook Crowdtangle API, 866,973 Reddit comments, and 11,702,214 Canadian politics-related tweets from August 1 to October 21, 2021.

These findings are consistent with the survey where we find that Canadian voters do not consider China to be a top electoral issue during the 44th Canadian election. Foreign Affairs ranks seven out of eight issues for importance. When discussion has happened amongst Canadians during the election, it has focused on the two Michaels, accusations that Trudeau is on China's side or in their pocket, and some continuing speculation about the scientists from the National Microbiology Laboratory in Winnipeg and the origins of COVID-19.

We see no evidence that China-related issues were consequential for the election, nor that the content circulated on social media had any influence on opinions at a national level. We cannot preclude the possibility, however, that there was some influence at the riding level. Moreover, the mere perception that China was able to influence the race in Steveston—RichmondEast may have a chilling effect on criticism of China in Canadian politics. Despite our findings and little scale evidence of interference, approximately 22% of Canadians believed that China did interfere to some extent in the Canadian election.

For the misinformation incidents part of the study, we asked a series of questions about the Global Times story that Chinese state media warned of retaliation if a Conservative government led by O'Toole adopts "unusually hostile" election promises regarding China.¹²⁶ Figure 24 shows exposure rates and evaluations of the importance the story had to the elections. The left panel shows the findings from the week immediately following the release of the story, while the right panel shows the responses in the post-election period. Very few people were exposed to the story in the first week — again underlying how peripheral Chinese issues were during the election. Among those who saw the story, approximately 60% believed it was important in the pre-election period.

In the post-election period, however, many more Canadianshad heard of the story and, most importantly, Chinese Canadians were more likely to believe that the story had been influential for the election. If there is a perception amongst Chinese Canadians that the Chinese state is able to influence the outcome of the election in a meaningful way through state media, community groups, or misinformation campaigns, then it could potentially impact the likelihood of Chinese Canadians to run for political office or otherwise contribute politically to Canada.

CHINA / DIPLOMACY

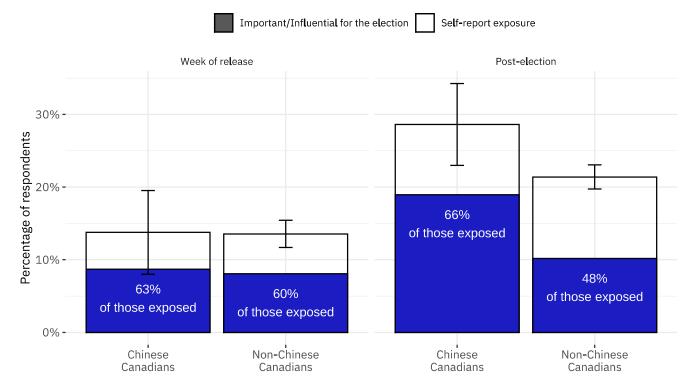
Canadian Tories' 'hostile China blueprint' caters to toxic atmosphere against Beijing amid sour ties

By Global Times



Erin O'Toole, Isader of Canadris Conservative Party, speaks during a Edend Isaders' deben in Gatinana, Queber, Canada, on Wednesday, Phon: VCO

Figure 24: Exposure rates and evaluations of the importance of the following story: "Chinese state-media warned of retaliation if a Conservative government-elect led by O'Toole adopts their "unusually hostile" election promises regarding China."



Unweighted means and 95% confidence intervals shown. Left panel based on 1,429 responses, 138 from Chinese Canadians. Right panel based on 2576 response, 248 from Chinese Canadians.

08 Vulnerabilities and recommendations

The project identified numerous examples of misinformation during the Canadian federal election, but found there was a limited impact on the overall Canadian election. This is heartening and speaks to the overall quality of the Canadian information ecosystem and a Canadian resilience to misinformation. However, this report has highlighted several challenges that should give Canadians pause.

First, there is a **fracturing of the Canadian information ecosystem** As recently as 2019, there was a widespread perception that Canadians had confidence in a core set of broadcast media organizations and were generally committed to a shared factual understanding. We observe that a large and growing number of Canadians are now obtaining their political information from a different set of sources. As more Canadians get their information primarily from social media platforms, there is an increasing danger of echo chambers or filter bubbles where people will mostly be exposed to information that either supports their existing worldview or promotes a narrow political view.

Second, it is becoming **more difficult to detect disinformation and coordinated information operations** The rise of platforms like Rumble and Gettr that exercise minimal moderation and focus on privacy means that bad actors can more easily produce and widely disseminate content anonymously. Monitoring closed groups and encrypted communications is challenging to do at scale. This more vibrant and chaotic set of information vectors provides opportunities for those seeking to mislead, misinform, or manipulate. Thus, detecting and hopefully countering misinformation is becoming more challenging.

Third, there continues to be a **gap between the reality and perceptions of misinformation and foreign interference**. Misinformation is perceived to be a major threat to democratic life, however, few Canadians can think of specific incidents they observed during the election that would be considered misinformation. We speculate that broadcast media's heavy amplification of claims of interference alongside rote use of terms like misinformation has produced a "boy who called wolf problem" wherein further claims of interference and misinformation are less likely to be taken seriously. Broad perceptions that the information ecosystem is being systematically and continuously manipulated can sow distrust and undermine trust in all information sources and can ultimately erode confidence in democracy and the democratic process even when no such foreign interference takes place. These perceptions can potentially modify the behaviour of voters and candidates. For example, Canadians of Chinese descent may be reticent to run for office if they believe, rightly or wrongly, that the Chinese state can mobilize a large number of anonymous social media accounts to spread misinformation and otherwise undermine their candidacy. A related concern is that

foreign actors who seek to influence the Canadian information ecosystem have to devote only **minimal resources to generate the perception they have successfully influenced Canadian politics**, because Canadians are primed to believe even low-evidence claims of successful influence.

Fourth, there is an emerging **set of Canadians who are deeply distrustful of Canadian democratic institutions**, including politicians, media outlets, and election administration bodies. These individuals are no longer sharing the same factual reality as the majority of Canadians. These individuals coalesced during the first year of the COVID-19 pandemic and have recently become more networked and organized. Many people in this group were drawn to the Truckers for Freedom movement where further organizing and capacity-building has taken place. This is now a digitally sophisticated and politically mobilized community with its own norms, perceptions, and leaders. Importantly, it is now also a part of a global distrustful network that draws upon events and arguments from disparate countries.

Taken together, these challenges require collective public action initiated at many different levels. Without an earnest response, Canadians' shared factual understanding will continue to be eroded, productive political debate will be more challenging, and foreign actors will enjoy having access to a range of information vectors to damage Canadian democracy. Such a collective public response demands response by governments, journalists, researchers, and the mass public.

Recommendations

These challenges have no quick-fix solutions, nor are they unique to the Canadian context. However, governments, journalists and media organizations, researchers, social media companies, and the general public each have a role to play to limit the pernicious impacts of malign information during and beyond elections. We provide four recommendations that can help address these challenges and build and maintain Canada's resilience to mis- and disinformation.

1) Develop a community of practice focused on tackling misinformation in Canada

As the information environment fractures, the task of monitoring and protecting against misinformation becomes more resource-intensive. Canada would benefit from a more coordinated approach. Researchers, government bodies, media organizations, and civil society organizations should develop a community of practice focused on providing continuous and well-resourced analysis of the information ecosystem, including regular public opinion surveys along with social media monitoring of popular platforms (e.g. Facebook, YouTube, Twitter) and niche platforms (e.g. VK, WeChat, Rumble, Telegram). The end goal is to have a rich understanding of misinformation vulnerabilities among the broad Canadian public, and among specific linguistic, geographic, and cultural communities.

Such a community of practice should have strong links to social media companies that maximize the availability of rich and as-complete-as-possible data, respect leading practices in ethical use of digital trace data, and protect the privacy of Canadians.

2) Engage in strategic countering of misinformation

Misinformation presents a continuous and evolving challenge, however, not all misinformation is threatening. At times, responding to misinformation may cause greater volatility around the subject or inadvertently further spread the misinformation.

Strategic decisions should be made about which false claims to debunk based on their origin, attention and engagement, and their potential damage, as well as the likelihood of a successful intervention. Anonymous accounts and online trolls with low impact and reach will always continue to bellow falsehoods. However, more pernicious forms of misinformation include foreign interference, astroturfing (e.g., coordinated amplification), and fabricated content (e.g., news fabrication, deep fakes). It is these latter forms of misinformation that should be addressed while the former should be left to blow by without further engagement.

Journalists and media organizations should develop and implement a set of journalistic standards around inadvertent amplification of misinformation. Associated training should be developed and widely provided.

3) Increase public resilience to misinformation

Declining trust in authoritative sources of information, including experts, governments, and core broadcast media constitutes one of the main challenges to the integrity of the information ecosystem. Concerted action to cultivate trust in democratic institutions is required, including but not limited to: more transparent government communications; improved science communication by the research community; more diverse algorithmic news feeds that prioritize reliable sources of information; support for local journalism; less toxic partisanship from political leaders; and better care from news media to avoid conflating opinion and reporting.

There also exist a variety of methods to directly improve citizens' resilience to misinformation, including factual correction (as previously discussed), inoculation or pre-bunking, and digital literacy initiatives. 'Prebunking' or forewarning about serious misinformation appears to be a promising intervention. ¹²⁷ For example, an education campaign about how ballots are counted in the run-up of elections may have helped limit the spread of vote-related misinformation in Canada. News, digital, and misinformation literacy initiatives must also focus on improving citizens' ability to think critically about the information they consume and to detect misinformation when they encounter it. Knowledge of the contexts in which misinformation is produced and what drives people to believe and share information significantly reduces susceptibility to misinformation. ¹²⁸

4) Extend initiatives to limit and counter misinformation to non-election periods

There is intense interest and scrutiny of political information during election period, and so broadcast and social media platforms pay closer attention to the content circulating, political advertising and foreign spending are more regulated, and there is a greater capacity for journalists, fact-checkers, and researchers to call out misinformation where it emerges. Elections, however, are not the only moments when misand disinformation matter. Vulnerability in the information ecosystem and misinformed and misinforming communities can and often do emerge outside of election periods. The Canadian election occurred between rampant COVID-19 misinformation and the Truckers for Freedom movement. By overfocusing on elections, large shifts and movements outside of electoral periods may go unnoticed. The threat to democracy may lie more in the slow and steady erosion of factual agreement, institutional trust, and social cohesion than in a flurry of election activity.

Those involved in monitoring and countering misinformation should consider extending their activities to non-election periods. Wherever possible, resources should be allocated for continuous research. Governing bodies may also wish to examine whether the regulatory regime in place during elections should be broadened to cover non-election periods, including but not limited to ad transparency, algorithmic audits, and limits on the use of foreign funds for advertising and partisan activities.

Endnotes

1 Owen, Taylor, Peter Loewen, Derek Ruths, Aengus Bridgman, Robert Gorwa, Stephanie MacLellan, Eric Merkley, and Oleg Zhilin. "Lessons in Resil ience: Canada's Digital Media Ecosystem and the 2019 Election." Public Policy Forum, 2020.

2 As documented in Canada in Bridgman, Aengus, Eric Merkley, Peter John Loewen, Taylor Owen, Derek Ruths, Lisa Teichmann, and Oleg Zhilin. 2020. "The Causes and Consequences of COVID-19 Misperceptions: Understanding the Role of News and Social Media." Harvard Kennedy School Misinformation Review 1 (3). https://doi.org/10.37016/mr-2020-028. And Bridgman, Aengus, Eric Merkley, Oleg Zhilin, Peter John Loewen, Taylor Owen, and Derek Ruths. 2021. "Infodemic Pathways: Evaluating the Role That Traditional and Social Media Play in Cross-National Information Transfer." Frontiers in Political Science 3. https://doi.org/10.3389/fpos.2021.648646.

3 Select Committee on Intelligence of the United States Senate. 2017. "Social Media Influence in the 2016 US Election." First Session, Wednesday, November 1. https://www.govinfo.gov/app/details/CHRG-115shrg27398/CHRG-115shrg27398.

4 Allcott, Hunt, and Matthew Gentzkow. "Social Media and Fake News in the 2016 Election." Journal of Economic Perspectives 31, no. 2 (2017): 211–36. https://doi.org/10.1257/jep.31.2.211.

5 Kim, Young Mie, Jordan Hsu, David Neiman, Colin Kou, Levi Bankston, Soo Yun Kim, Richard Heinrich, Robyn Baragwanath, and Garvesh Raskut ti. "The Stealth Media? Groups and Targets behind Divisive Issue Campaigns on Facebook." Political Communication 35, no. 4 (October 2, 2018): 515–41. https://doi.org/10.1080/10584609.2018.1476425.

6 Anne Applebaum, Peter Pomerantsev, Melanie Smith and Chloe Colliver. "Make Germany Great Again" – Kremlin, Alt-Right and International Influences in the 2017 German Elections", The Institute for Strategic Dialogue, 2017, 20. https://www.isdglobal.org/wp-content/uploads/2017/12/ Make-Germany-Great-Again-ENG-081217.pdf.

7 Fabian Zimmermann and Matthias Kohring, "Mistrust, Disinforming News, and Vote Choice: A Panel Survey on the Origins and Consequences of Believing Disinformation in the 2017 German Parliamentary Election," Political Communication 37, no. 2 (2020): 215, https://doi.org/10.1080/1058 4609.2019.1686095.

8 Hundal, Sunny. "The Campaigns Trying to Turn British Indians against Each Other." openDemocracy, December 10, 2019. https://web.archive.org/ web/20210727141014/https://www.opendemocracy.net/en/opendemocracyuk/campaigns-trying-turn-british-indians-against-each-other/.

9 Colliver, Chloe. "Click Here for Outrage: Disinformation in the European parliamentary elections 2019", The Institute for Strategic Dialogue, 2019. https://web.archive.org/web/20210923191127/https://www.isdglobal.org/wp-content/uploads/2020/06/isd_Click-for-Outrage.pdf.

10 For example, AI-Rawi found 33,542 tweets about Canada posted by both Russian and Iranian affiliated Twitter trolls ahead of the 2015 Federal Election. Russian trolls were the most active of the two nationalities, typically sending Russian language tweets that appear to have been directed at Russian speaking Canadians. AI-Rawi found that while Russian accounts were pro-Conservative and anti-Liberal, Iranian accounts supported traditionally Leftist issue areas. See AI-Rawi, Ahmed. "How Did Russian and Iranian Trolls' Disinformation toward Canadian Issues Diverge and Converge?" Digital War 2, no. 1 (2021): 23. https://doi.org/10.1057/s42984-020-00029-4.

11 Tunney, Catharine, and Ashley Burke. "Intelligence Agencies Briefing Federal Parties Twice a Week on Foreign Attempts to Influence Election: Sources." CBC, September 16, 2019. https://web.archive.org/web/20211121000807/https://www.cbc.ca/news/politics/china-india-interfer - ence-1.5284473.

13 Machado, Gary, Alexandre Alaphilippe, Roman Adamczyk, and Antoine Grégoire. "Indian Chronicles: Deep Dive into a 15-Year Operation Target ing the EU and UN to Serve Indian Interests." EU DisinfoLab, 2020. https://web.archive.org/web/20211224050102/https://www.disinfo.eu/publica - tions/indian-chronicles-deep-dive-into-a-15-year-operation-targeting-the-eu-and-un-to-serve-indian-interests.

14 Colliver, Chloe, Peter Pomerantsev, Anne Applebaum, and Jonathan Birdwell. 2018. "Smearing Sweden: International Influence Campaigns in the 2018 Swedish Election." Institute for Strategic Dialogue. https://www.isdglobal.org/isd-publications/smearing-sweden-international-influ - ence-campaigns-in-the-2018-swedish-election/.

15 Colliver, 2019.

16 Colliver 2019, 6.

17 Jacob Davey and Julia Ebner. "The Great Replacement': The Violent Consequences of Mainstreamed Extremism", The Institute for Strategic Di alogue, 2019. https://web.archive.org/web/20211213215422/https://www.isdglobal.org/isd-publications/the-great-replacement-the-violent-con - sequences-of-mainstreamed-extremism/.

18 The Institute for Strategic Dialogue, "The Battle for Bavaria: Online information campaigns in the 2018 Bavarian State Election", 2019, 21. https://web.archive.org/web/20210809082800/https://www.isdglobal.org/wp-content/uploads/2019/02/The-Battle-for-Bavaria.pdf.

19 Cantarella, Michele, Nicolò Fraccaroli, and Roberto Volpe. 2020. "Does Fake News Affect Voting Behaviour?" SSRN Scholarly Paper ID 3629666. Rochester, NY: Social Science Research Network. https://doi.org/10.2139/ssrn.3629666.

20 Zimmermann and Kohering, 233.

21 Brin, Colette. "Canada." In Reuters Institute Digital News Report 2021, edited by Nic Newman, Richard Fletcher, Anne Schulz, Simge Andı, Craig T. Robertson, and Rasmus Kleis Nielsen. Reuters Institute for the Study of Journalism, 2021.

22 Ruiz-Soler, Javier, Mathieu Lavigne, Colette Brin, and Aengus Bridgman. "Disinformation Risk Assessment: The Online News Market in Canada." Global Disinformation Index, 2021.

23 Humprecht, Edda, Frank Esser, and Peter Van Aelst. "Resilience to Online Disinformation: A Framework for Cross-National Comparative Re search." The International Journal of Press/Politics 25, no. 3 (2020): 493–516. https://doi.org/10.1177/1940161219900126.

24 Boulianne, Shelley, Stephanie Belland, Chris Tenove, and Kelsey Friesen. "Misinformation Across Social Media Platforms and Across Countries," 2021. https://roam.macewan.ca/islandora/object/gm%3A2822/datastream/OBJ/view.

25 Owen, Taylor, Peter Loewen, Derek Ruths, Aengus Bridgman, Robert Gorwa, Stephanie MacLellan, Eric Merkley, and Oleg Zhilin. "Lessons in Resilience: Canada's Digital Media Ecosystem and the 2019 Election." Public Policy Forum, 2020. https://web.archive.org/web/20210925022000/ https://ppforum.ca/wp-content/uploads/2020/05/DDP-LessonsInResilience-MAY2020-EN.pdf.

26 Merkley, Eric, Aengus Bridgman, Peter John Loewen, Taylor Owen, Derek Ruths, and Oleg Zhilin. "A Rare Moment of Cross-Partisan Consensus: Elite and Public Response to the COVID-19 Pandemic in Canada." Canadian Journal of Political Science/Revue Canadienne de Science Politique 53, no. 2 (2020): 311–18. https://doi.org/10.1017/S0008423920000311.

27 Pennycook, Gordon, Jonathon McPhetres, Bence Bago, and David Gertler Rand. "Beliefs about COVID-19 in Canada, the U.K., and the U.S.A.: A Novel Test of Political Polarization and Motivated Reasoning." Personality and Social Psychology Bulletin, 2021, 1–16. https://doi. org/10.1177/01461672211023652.

28 Canadian Security Intelligence Service. "Foreign Interference Threats to Canada's Democratic Process." Ottawa: Canadian Security Intelligence Service, 2021. https://web.archive.org/web/20220113175426/https://www.canada.ca/content/dam/csis-scrs/documents/publications/2021/for - eign-interference-threats-to-canada%27s-democratic-process.pdf.

29 Communications Security Establishment. 2021.

30 The exact wording of the situations presented in this graph was the following: (1) A user propagating false information on social media; (2) A media outlet consciously reporting on an event that did not occur; (3) A foreign government using propaganda to influence Canadian public opinion; (4) A media outlet using sensationalist headlines to attract more readers; (5) A user deliberately posting inflammatory, irrelevant, or offensive comments on social media; (6) A user targeting a group with hate speech on social media; (7) A politician making promises they can't keep to get elected; (8) A media outlet promoting a particular ideology.

31 These responses had to be specific misinformation incidents, and were not counted if they were broad answers or comments such as "social media" or "fake news".

32 These three variables are strongly correlated, with correlations varying between 0.65 and 0.73. The results of principal component analysis indicate that these three items load on a single factor with a Cronbach alpha of 0.87.

33 There is greater uncertainty around the estimate for People's Party identification, given the small number of respondents identifying with the People's Party (98 in our sample).

34 Other research has found similarly high results, see: Andrey, Sam, Alexander Rand, M.J. Masoodi, and Karim Bardeesy. "Rebuilding Canada's Public Square." cybersecure policy exchange, September 29, 2021. https://www.cybersecurepolicy.ca/public-square.

35 http://web.archive.org/web/20220219014723/https://twitter.com/cafreeland/status/1429429537012658178

36 Gallant, Cheryl. "Is Trudeau Planning A Climate Lockdown." YouTube, June 18, 2021. https://web.archive.org/web/20210829160825/https:// www.youtube.com/watch?v=EM8Bx5jur5s.

37 Taylor, Stephanie. "Candidate Raises Concern about 'climate Lockdown, O'Toole Says Focus Is Platform." CP24, August 29, 2021. https://web. archive.org/web/20210829190622/https://www.cp24.com/news/candidate-raises-concern-about-climate-lockdown-o-toole-says-focus-is-plat form-1.5565802.

38 Dunn, Derek. "Cheryl Gallant Escapes Conservative Leader's Wrath on Campaign Trail." The Star, August 31, 2021. https://web.archive.org/ web/20211213203547/https://www.thestar.com/local-arnprior/news/federal-election/2021/08/31/cheryl-gallant-escapes-conservative-leader-swrath-on-campaign-trail.html?itm_source=parsely-api.

39 http://web.archive.org/web/20210906113108/https://twitter.com/gmbutts/status/1434841528409669634

40 Press Progress. "3 Things You Need to Know About The Far-Right Protests Targeting Canadian Hospitals and Justin Trudeau's Campaign Events." Press Progress, September 7, 2021. https://web.archive.org/web/20211213204657/https://pressprogress.ca/3-things-you-need-to-know-about-the-far-right-protests-targeting-canadian-hospitals-and-justin-trudeaus-campaign-events/.

41 http://web.archive.org/web/20210912223902/https://twitter.com/3rdtimewalter/status/1437183908521684996

42 Berthiaume, Lee. "Trudeau Says He Did Not Want Wilson-Raybould to Lie in SNC-Lavalin Affair." CBC, September 11, 2021. https://web.archive. org/web/20211014142503/https://www.cbc.ca/news/politics/trudeau-wilson-raybould-book-lavalin-campaign-1.6172732.

43 Tasker, John Paul. "Trudeau Warns of 'consequences' for Public Servants Who Duck COVID-19 Shots." CBC, August 17, 2021. https://web. archive.org/web/20220106050018/https://www.cbc.ca/news/politics/trudeau-consequences-public-servants-vaccines-1.6143735.

44 Rabson, Mia. "Trudeau Climate Promises Interrupted by Angry Crowd in Ontario | CTV News." CTV News, August 29, 2021. https://web.archive. org/web/20220111192443/https://www.ctvnews.ca/politics/federal-election-2021/trudeau-climate-promises-interrupted-by-angry-crowd-in-on tario-1.5565699. **45** Pirro, Raphaël. "Vaccination: O'Toole Croit Pouvoir Atteindre 90% En Deux Mois." Le Journal de Montréal, September 4, 2021. https://web. archive.org/web/20211128194901/https://www.journaldemontreal.com/2021/09/04/preuve-vaccinale-otoole-promet-un-systeme-national-1.

46 Global Times. "Canadian Tories' 'hostile China Blueprint' Caters to Toxic Atmosphere against Beijing amid Sour Ties," September 9, 2021. https://web.archive.org/web/20211229053559/https://www.globaltimes.cn/page/202109/1233869.shtml

47 Bode, Leticia. "Political News in the News Feed: Learning Politics from Social Media." Mass Communication and Society 19, no. 1 (2016): 24–48. https://doi.org/10.1080/15205436.2015.1045149.

48 This overreporting of stories is a challenge for any research that asks for recall on specific news items, with overreporting being rampant. The solution, not available here, is to integrate digital trace and survey data. For a full discussion, see Vraga, Emily K., and Melissa Tully. "Who Is Exposed to News? It Depends on How You Measure: Examining Self-Reported Versus Behavioral News Exposure Measures." Social Science Computer Review 38, no. 5 (2020): 550–66. https://doi.org/10.1177/0894439318812050.

49 Bogart, Nicole. 2021. "Known White Nationalists, Far-Right Groups among Election Protest Organizers, Expert Says." CTVNews, September 9, 2021, sec. Federal Election 2021. https://www.ctvnews.ca/politics/federal-election-2021/known-white-nationalists-far-right-groups-among-elec - tion-protest-organizers-expert-says-1.5579181.

50 Hameleers, Michael, Edda Humprecht, Judith Möller, and Jula Lühring. "Degrees of Deception: The Effects of Different Types of COVID-19 Misin formation and the Effectiveness of Corrective Information in Crisis Times." Information, Communication & Society (2021): 1–17. https://doi.org/10. 1080/1369118X.2021.2021270.

51 For example, Bridgman, Aengus, Eric Merkley, Peter John Loewen, Taylor Owen, Derek Ruths, Lisa Teichmann, and Oleg Zhilin. 2020. "The Caus es and Consequences of COVID-19 Misperceptions: Understanding the Role of News and Social Media." Harvard Kennedy School Misinformation Review 1 (3). https://doi.org/10.37016/mr-2020-028.

52 Gruzd, Anatoliy, and Philip Mai. "The State of Social Media in Canada 2020." Ryerson University Social Media Lab, 2020. DOI: 10.5683/SP2/XI W8EW. The data from Gruzd and Mai (2020) was used. They asked Canadian respondents: "How often do you visit the following social media sites / messaging apps?" The numbers displayed in the Figure are the monthly active users, that is, respondents who visit the social media platform at least once every month. For political activity, the question wording was: "Over the past week, which of the following social media applications did you use to watch, read, or listen to news about politics?"

53 A recent report by the Institute for Strategic Dialogue (ISD) found that online communities of Canadian right-wing extremists are key drivers of disinformation within Canada. Hart, Mackenzie, Jacob Davey, Eisha Maharasingam-Shah, Ciaran O'Connor, and Aoife Gallagher. 2021. "An Online Environmental Scan of Right-Wing Extremism in Canada." Institute for Strategic Dialogue.

54 Maple Diversity Blog. "Why Does WeChat Matter to Canadian Companies?" September 5, 2019. https://web.archive.org/web/20210414142447/ https://maplediversity.ca/wechat-canada/.

55 Issues were shown to respondents in a random order. We also asked respondents about the importance of each issue for the average Canadian, which did not differ much from their personal impressions of each issue's importance.

56 There is some difference in the perceived importance of each issue among these groups. For example, Indigenous issues are perceived as more important by Liberal and NDP supporters than among Bloc Québécois supporters.

57 See, for example: Elections Canada. "Survey of Electors on Communications with Electors," May 12, 2020. https://www.elections.ca/content. aspx?section=res&dir=cons/sece&document=p8&lang=e.

58 Numerous Telegram messages across multiple channels being monitored dated from September 18-20, 2021 claimed that mail-in ballots were easy to manipulate and that a plan had already been put into place by Trudeau to rig the election.

59 Quote taken from image from 4Chan post, date unknown.

60 Marquis, Mélanie. "Bernier cherche des « patriotes » pour observer le scrutin." La Presse, September 14, 2021, sec. Élections fédérales. https:// web.archive.org/web/20210916152855/https://www.lapresse.ca/elections-federales/2021-09-14/bernier-cherche-des-patriotes-pour-observ er-le-scrutin.php.

61 Staff. "Elections Canada Seeks 'Complete Picture' of Indigenous Voting Errors, Launches Probe - National." Global News, November 4, 2021. https://web.archive.org/web/20211220061605/https://globalnews.ca/news/8350060/elections-canada-Indigenous-voting-probe/.

62 One commonly-mentioned claim was that the results would not be available the night of the election and that ballots would be 'discovered' in the days following the election that would be fake and cause incorrect winners. The Canada Elections Act forbids counting any ballots until after polls close and the larger-than-usual number of mail-in ballots ordered by voters this election could have caused a delay in the announcement of the election result, a scenario which was widely predicted, including by the Chief Electoral Commissioner and widely covered in various media reports.

63 See, for example: Elections Canada. "Survey of Electors on Communications with Electors," May 12, 2020. https://www.elections.ca/content. aspx?section=res&dir=cons/sece&document=p8&lang=e .

64 D'Andrea, Aaron. "Fourth Wave of COVID-19 Now Underway in Canada, Dr. Theresa Tam Says." Global News, August 12, 2021. https://web. archive.org/web/20220110172835/https://globalnews.ca/news/8107100/fourth-wave-covid-19-canada-dr-theresa-tam/.

65 Free Press Staff. "People's Party Official Charged with Assault in Justin Trudeau StoneThrowing." The London Free Press, September 12, 2021. https://web.archive.org/web/20211214103403/https://lfpress.com/news/local -news/peoples-party-official-charged-with-assault-in-justin-trudeau-stone-throwing. **66** The five false statements were the following: (1) The Chinese government developed the coronavirus as a bioweapon; (2) A group funded by Bill Gates patented the coronavirus that causes COVID-19; (3) The current pandemic is part of a global effort to force everyone to be vaccinated whether they want to or not; (4) Homeopathy and home remedies can help manage and prevent the coronavirus; (5) Ivermectin, an anti-parasite medicine used in livestock, is an effective prevention method and treatment against COVID-19.

67 The higher perceived truthfulness of the forced vaccination statement might be explained by the relatively confusing wording of that statement.

68 Based on an OLS regression model. Our sample includes 157 respondents (2.3% of the sample) who intended to vote for the People's Party during the campaign. The dependent variable thus has a mean of 0.023 and a standard deviation of 0.15. In addition to the variables shown in Fig - ure 14, the model also controls for language and region. Issue positions are measured in terms of support for more action on each of these issues.

69 Global News. "Canada Election: Trudeau Says Rebel News Needs to 'Take Accountability' for Increasing Polarization." Global News, Sep tember 8, 2021. https://web.archive.org/web/20211220052354/https://globalnews.ca/video/8176841/canada-election-trudeau-says-reb - el-news-needs-to-take-accountability-for-increasing-polarization.

70 A video by the Conservative Party that crudely parodied a scene from Willy Wonka was removed from the platform before Freeland's tweet, but this was due to a copyright claim, not misinformation.

71 United Nations. "Secretary-General Calls Latest IPCC Climate Report 'Code Red for Humanity', Stressing 'Irrefutable' Evidence of Human Influence," September 9, 2021. https://web.archive.org/web/20211213210050/https://www.un.org/press/en/2021/sgsm20847.doc.htm.

72 As an example: https://web.archive.org/web/20210920013706/https://twitter.com/jenwinter_YYC/status/1439279411254099975

73 Navius Research Inc. "FAQ," April 16, 2021. https://web.archive.org/web/20210827214951/https://www.naviusresearch.com/wp-content/up - loads/2021/04/2021-04-16-CP-Plan-FAQ.pdf.

74 Woodside, John. "Leaders' Debate Highlighted Canada's Challenges in Tackling the Climate Crisis." Canada's National Observer, September 10, 2021. https://web.archive.org/web/20210922221025/https://www.nationalobserver.com/2021/09/10/news/leaders-debate-highlighted-cana - das-challenges-tackling-climate-crisis.

75 People's Party of Canada. "Global Warming and Environment: Rejecting Alarmism and Focusing on Concrete Improvements," 2021. https://web. archive.org/web/20211213215621/https://www.peoplespartyofcanada.ca/global-warming-environment.

76 This YouTube video was first posted in June 2021. Gallant, Cheryl. "Is Trudeau Planning A Climate Lockdown." YouTube, June 18, 2021. https://web.archive.org/web/20210829160825/https://www.youtube.com/watch?v=EM8Bx5jur5s.

77 Blackstock, Cindy. "Don't Let the Government 'Move on' from Residential Schools. Vote to Stop Canada's 'Dark History." Global News, September 10, 2021. https://web.archive.org/web/20210914115423/http://globalnews.ca/news/8177650/canada-election-residential-schools-vote-Indige - nous-children/.

78 See, for example: Gravelle, Timothy B., Thomas J. Scotto, Jason Reifler, and Harold D. Clarke. "Foreign Policy Beliefs and Support for Stephen Harper and the Conservative Party." Canadian Foreign Policy Journal 20, no. 2 (2014): 111–30. https://doi.org/10.1080/11926422.2014.936477.

Landriault, Mathieu. "Does Voting End at the Water's Edge? Canadian Public Opinion and Voter Intentions, 2006–2015." Canadian Foreign Policy Journal 22, no. 3 (2016): 249–61. https://doi.org/10.1080/11926422.2016.1166143.

79 Aziz, Saba, and Aaron D'Andrea. "Canadian Michael Spavor Sentenced to 11 Years in Chinese Prison for Espionage." Global News, August 10, 2021. https://web.archive.org/web/20210928002949/https://globalnews.ca/news/8101764/michael-spavor-china-guilty-verdict/.

80 Global News. "Minister Monsef Says Calling Taliban 'Brothers' Was 'Cultural' Reference | Watch News Videos Online." Global News, August 25, 2021. https://web.archive.org/web/20210827033004/https://globalnews.ca/video/8140114/minister-monsef-says-calling-taliban-broth - ers-was-cultural-reference.

81 Fife, Robert, and Steven Chase. "Justin Trudeau's Book Was Republished by a Chinese State-Owned Company after He Became Prime Minis ter." The Globe and Mail, September 14, 2021. https://web.archive.org/web/20211224015550/https://www.theglobeandmail.com/politics/arti - cle-the-legend-continues-how-a-state-owned-company-republished-justin/.

82 Seo, Hyunjin, Matthew Blomberg, Darcey Altschwager, and Hong Tien Vu. "Vulnerable Populations and Misinformation: A Mixed-Meth ods Approach to Underserved Older Adults' Online Information Assessment." New Media & Society 23, no. 7 (2021): 2012–33. https://doi.org/10.1177/1461444820925041.

83 Armstrong, David A., Jack Lucas, and Zack Taylor. "The Urban-Rural Divide in Canadian Federal Elections, 1896–2019." Canadian Journal of Political Science/Revue Canadienne de Science Politique, 2021, 1–23. https://doi.org/10.1017/S0008423921000792.

84 Lunz Trujillo, Kristin. "Rural Identity as a Contributing Factor to Anti-Intellectualism in the U.S." Political Behavior, February 2, 2022. https://doi. org/10.1007/s11109-022-09770-w.

85 Merkley, Eric, and Peter John Loewen. "Anti-Intellectualism and the Mass Public's Response to the COVID-19 Pandemic." Nature Human Be haviour 5, no. 6 (June 2021): 706–15. https://doi.org/10.1038/s41562-021-01112-w.

86 Soroka, Stuart Neil. Agenda-Setting Dynamics in Canada. UBC Press, 2002.

87 See Johnston, Richard. Letting the People Decide: Dynamics of a Canadian Election. Stanford: Stanford University Press, 1992.

88 Ksiazek, Thomas B, and James G Webster. 2008. "Cultural Proximity and Audience Behavior: The Role of Language in Patterns of Polarization and Multicultural Fluency." Journal of Broadcasting & Electronic Media 52 (3): 485–503.

89 Bridgman, Aengus, Eric Merkley, Oleg Zhilin, Peter John Loewen, Taylor Owen, and Derek Ruths. 2021. "Infodemic Pathways: Evaluating the Role That Traditional and Social Media Play in Cross-National Information Transfer." Frontiers in Political Science 3. https://doi.org/10.3389/ fpos.2021.648646. **90** Francophones and anglophones are defined here in terms of the language in which they answered the survey.

91 For more information on this, see Lavigne, Mathieu, and Aengus Bridgman. 2021. "Geographies of Misinformation: Evaluating Subnational Differences in Resilience to Online Misinformation". Canadian Political Science Association Annual Conference.

92 Armstrong, David A., Jack Lucas, and Zack Taylor. "The Urban-Rural Divide in Canadian Federal Elections, 1896–2019." Canadian Journal of Political Science/Revue Canadienne de Science Politique, 2021, 1–23. https://doi.org/10.1017/S0008423921000792.

93 Collins, Jessica L., and Barry Wellman. "Small Town in the Internet Society: Chapleau Is No Longer an Island." American Behavioral Scientist 53, no. 9 (2010): 1344–66. https://doi.org/10.1177/0002764210361689.

94 Whitacre, Brian E., and Jacob L. Manlove. "Broadband and Civic Engagement in Rural Areas: What Matters?" Community Development 47, no. 5 (2016): 700–717. https://doi.org/10.1080/15575330.2016.1212910.

95 In our sample, 21% of Canadians identify as rural Canadians and 48% identify as urban Canadians.

96 Significant at p < 0.1.

97 De Rosa, Nicholas, and Jeff Yates. "Non, une preuve vaccinale ne sera pas exigée pour pouvoir voter à l'élection fédérale." Radio-Canada. Sep tember 2, 2021.https://web.archive.org/web/20220127002606/https://ici.radio-canada.ca/nouvelle/1821271/preuve-vaccinale-voter-20-13-12-11-10-septembre-election-federale-vaccin-passeport

98 https://web.archive.org/web/20210928003044/https://twitter.com/ElectionsCan F/status/1432740772189773826

99 Bridgman, Aengus, Eric Merkley, Oleg Zhilin, Peter John Loewen, Taylor Owen, and Derek Ruths. "Infodemic Pathways: Evaluating the Role That Traditional and Social Media Play in Cross-National Information Transfer." Frontiers in Political Science 3 (2021). https://doi.org/10.3389/ fpos.2021.648646.

100 E.g., Mosby, Ian, and Jaris Swidrovich. "Medical Experimentation and the Roots of COVID-19 Vaccine Hesitancy among Indigenous Peoples in Canada." CMAJ 193, no. 11 (2021): E381–83.

101 Department of Justice Canada. "Principles Respecting the Government of Canada's Relationship with Indigenous Peoples," September 1, 2021. https://web.archive.org/web/20211205180150/https://www.justice.gc.ca/eng/csj-sjc/principles-principes.html.

102 Griffith, Janessa, Husayn Marani, and Helen Monkman. "COVID19 Vaccine Hesitancy in Canada: Content Analysis of Tweets Using the Theoret ical Domains Framework." Journal of Medical Internet Research 23, no. 4 (2021): e26874. https://doi.org/10.2196/26874.

103 Peoples Of The Salmon. Accessed November 19, 2021. https://web.archive.org/web/20211123142353/https://peoplesofthesalmon.net/.

104 Orlewicz, Odessa. "Odessa Orlewicz Interviews Popois, Peoples of the Salmon Headsman, an Indigenous Warrior of Light." BitChute, October 26, 2021. https://www.bitchute.com/video/SEjUxiHM56Cl/.

105 456 respondents self-identify as "Indigenous."

106 Ladner, Kiera L., and Michael McCrossan. "The Electoral Participation of Aboriginal People." Ottawa: Elections Canada, 2007. https://web. archive.org/web/20210511180102/https://elections.ca/res/rec/part/paper/aboriginal/aboriginal e.pdf.

107 Staff. "Elections Canada Seeks 'Complete Picture' of Indigenous Voting Errors, Launches Probe." Global News, November 4, 2021. https://web. archive.org/web/20211220061605/https://globalnews.ca/news/8350060/elections-canada-Indigenous-voting-probe/.

108 Terry Nguyen, "Fake News in Asian American Communities Can Affect Elections," Vox, November 27, 2020, https://web.archive.org/ web/20211119175230/https://www.vox.com/identities/21579752/asian-american-misinformation-after-2020.

109 It should be noted that, in contrast to the American case study, Whatsapp groups were not infiltrated. This creates a gap in our data collection, particularly for South Asians, who prefer to use Whatsapp as their preferred form of social media. To compensate for this, we examined non-English media on the three platforms (Twitter, Facebook, and YouTube) primarily in the languages of Hindi and Punjabi to survey any spread of misinformation that would be undetected by social media algorithms.

110 "The AAPI umbrella represents voters from more than 30 different ethnic groups and languages, misinformation campaigns within these communities are challenging to track. For example, Chinese Americans who hail from mainland China tend to use WeChat, while those from Taiwan and Hong Kong use Line and WhatsApp, respectively. Korean Americans have KakaoTalk, Vietnamese Americans mostly rely on Facebook, and many Indian Americans use WhatsApp.", see Nguyen, 2020.

111 Nguyen, 2020.

112 "Canadian Politician Jagmeet Singh under Radar of Indian Intelligence," OpIndia, October 25, 2019,

113 Maura Forrest, "As Jagmeet Singh Condemns Terrorism, Second Video Shows Him Speaking alongside Sikh Separatist | National Post," National Post, March 14, 2018, https://nationalpost.com/news/politics/as-jagmeet-singh-condemns-terrorism-second-video-shows-him-speaking-along - side-sikh-separatist.

114 Canadian Security Intelligence Service. "Foreign Interference Threats to Canada's Democratic Process." Ottawa: Canadian Security Intelligence Service, 2021. https://web.archive.org/web/20220113175426/https://www.canada.ca/content/dam/csis-scrs/documents/publications/2021/for - eign-interference-threats-to-canada%27s-democratic-process.pdf.

115 We asked respondents: "To the best of your knowledge, did the following countries interfere in the 2021 Canadian federal election?" The following countries were presented in a random order: China, the United States, Russia, and Iran. Answer choices were: "No," "Yes," or "Don't know/ Prefer not to answer".

116 Ipsos. "Nine in Ten (90%) Canadians Believe Barack Obama Will Retain Presidency and 86% Would Vote for Obama If They Could." Ipsos, November 3, 2012. https://web.archive.org/web/20210223225043/https://www.ipsos.com/en-ca/nine-ten-90-canadians-believe-barack-obama-will-retain-presidency-and-86-would-vote-obama-if-they

117 Bricker, Darrell. "President Obama Leaves Office with High Worldwide Approval Ratings – But Global Expectations for Trump Are More Pessimistic." Ipsos, January 23, 2017. https://web.archive.org/web/20210305194701/https://www.ipsos.com/en-ca/news-polls/presi - dent-obama-leaves-office-high-worldwide -approval-ratings

118 Grenier, Éric. "Democrats Would Beat Donald Trump in a Landslide — If Only Canada Joined the Union." CBC, August 1, 2016. https://web. archive.org/web/20220106023138/http://www.cbc.ca/news/politics/grenier-canada-us-election-1.3699457.

119 Bridgman, Aengus, Eric Merkley, Oleg Zhilin, Peter John Loewen, Taylor Owen, and Derek Ruths. "Infodemic Pathways: Evaluating the Role That Traditional and Social Media Play in Cross-National Information Transfer." Frontiers in Political Science 3 (2021). https://doi.org/10.3389/ fpos.2021.648646.

120 Benkler, Yochai, Casey Tilton, Bruce Etling, Hal Roberts, Justin Clark, Robert Faris, Jonas Kaiser, and Carolyn Schmitt. "Mail-in voter fraud: Anat omy of a disinformation campaign." Berkman Center Research Publication 2020-6 (2020).

121 Marquis, Mélanie. "Bernier cherche des « patriotes » pour observer le scrutin." La Presse, September 14, 2021, sec. Élections fédérales. https:// web.archive.org/web/20210916152855/https://www.lapresse.ca/elections-federales/2021-09-14/bernier-cherche-des-patriotes-pour-observ er-le-scrutin.php.

122 This claim is a direct reference to Canada's detention of Huawei executive Meng Wanzhou for extradition to the United States.

123 Statistics Canada. "Census Profile. 2016 Census. Steveston--Richmond East [Federal Electoral District], British Columbia and British Columbia [Province]." 2017. https://web.archive.org/web/20190628130401/https://www12.statcan.gc.ca/census -recensement/2016/dp -pd/prof/details/ page.cfm?Lang=E&Geo1=FED&Code1=59031&Geo2=PR&Code2=59&SearchText=Steveston--Richmond%20East&SearchType=Begins&Search PR=01&B1=All&GeoLevel=PR&GeoCode=59031&TABID=1&type=0.

124 Boutilier, Alex. "Conservatives Believe 13 Ridings Were Targeted by Foreign Interference in 2021 Election." Global News, December 15, 2021. https://web.archive.org/web/20220206175843/https://globalnews.ca/news/8452551/conservatives-foreign-interference-canada-election-2021/.

125 Lalh, Karamveer. "Karamveer Lalh: The Chinese Government (Probably) Didn't Sabotage Erin O'Toole's Chances." The Line, October 7, 2021. https://web.archive.org/web/20220203235832/https://theline.substack.com/p/karamveer-lalh-the-chinese-government.

126 Global Times. "Canadian Tories' 'hostile China Blueprint' Caters to Toxic Atmosphere against Beijing amid Sour Ties," September 9, 2021. https://web.archive.org/web/20211229053559/https://www.globaltimes.cn/page/202109/1233869.shtml

127 Lewandowsky, Stephan, and Sander van der Linden. 2021. "Countering Misinformation and Fake News Through Inoculation and Prebunking." European Review of Social Psychology 32 (2): 348–84. https://doi.org/10.1080/10463283.2021.1876983.

128 See, for example: Cunliffe-Jones, Peter, Assane Diagne, Alan Finlay, Sahite Gaye, Wallace Gichunge, Chido Onumah, Cornia Pretorius, and Anya Schiffrin. Misinformation Policy in Sub-Saharan Africa: From Laws and Regulations to Media Literacy. University of Westminster Press, 2021. https://doi.org/10.16997/book53.

Appendices

Appendix A: Social Media scan methodology

To provide continuous monitoring of Canadian social media, the project recruited nine researchers to actively seek out political information-sharing communities in Canada. Each researcher focused on a specific community (e.g. rural Canadians), a specific issue area (e.g. Climate Change), or a specific platform (e.g. WeChat or TikTok). They used a combination of keyword-assisted community detection alongside a snowball method to locate spaces in which political discussions were occuring.

Researchers with platforms, channels, groups, and hashtags that were already known. Researchers first searched across main platforms for relevant keywords, joined groups, channels, and monitored hashtags. Once relevant online spaces were found, they monitored the content posted and shared in those spaces to identify other areas where conversations might be occurring.

Appendix B: Broadcast Media collection methodology

Broadcast media was collected using the Facebook CrowdTangle API. First, we manually identified 166 Facebook pages from Canadian media outlets alongside 26 Chinese-language and Chinese state media accounts. We then collected all posts to those pages during both the 2019 and 2021 Canadian federal elections. After cleaning and organizing the data, this left us with 89,520 articles from 133 outlets during the 2019 writ period and 76,900 articles from 159 outlets during the 2021 writ period.

For our keyword identification approach, we used the following English and French-language dictionaries.

English-language dictionary

list(
<pre>``misinfo" = c(``misinformation","disinformation", ``fake news", ``propaganda"),</pre>
"healthcare" = c("health", "drug", "medication", "medicine", "health-care", "healthcare",
"doctor", "nurse", "physician", "medical", "pharma", "surgeon", "surgery"),
"covid19" = c("pandemic", "epidemic", "covid", "corona", "sars-cov-2", "2019-nCoV"),
"gov_spend" = c("tax", "job", "deficit", "public debt", "federal debt", "government
spending", "public spending", "federal spending", "balanced budget", "balance the budget",
"balancing the budget"),
"crime" = c("crime", "criminality", "shootings", "gunshot", "guns", "gun control",
"firearm", "assault weapon", "prison", "street gang", "gun violence", "gang violence"),
"china" = c('china', 'chinese', 'xi jinping', ' ccp ', 'hong kong', 'global times',
`xinhua', ``people's daily"),
<pre>``michaels" = c(``spavor", ``kovrig", ``wanzhou", ``michaels"),</pre>
"climate" = c("environment", "climate", "carbon", "greenhouse gas", "paris climate accord",
"cap on emissions", "steven guilbeault", "fossil fuels", "carbon border adjustments",
"net-zero", "net zero", "zero-emission", " zev ", " co2 ", "nuclear energy", "trans
<pre>mountain", "pipeline", "transmountain", "keystone xl", "emissions", "pollution", "paris</pre>
targets", "tanker ban", "oil tanker moratorium", "oil and gas", "cop26", "clean energy",
"clean energies", "green energy", "green energies", "green job", "green technology",

"plastic waste", "single use plastic", "renewable energy", "electrification"),

"inequality" = c("unemployment", "social welfare", "housing", "access to property", "gentrification", "inequality", "retirement", "homeless", "unhoused", "poverty", "less well off", "food aid", "food bank", "low income", "minimum salary", "guaranteed basic income", "social justice", "cost of living", "living wage", "super-rich"),

school", "mmiw", "first nations", "metis", "inuit", " itk ", " afn ", "every child matters", "treaty", "undrip", "droits territoriaux", "clean water problem", "access to clean water")

)

French-language dictionary

list(

"misinfo" = c("mésinformation", "désinformation", "réinformation", "fausses nouvelles",
"propagande", "misinformation", "disinformation"),

"healthcare" = c("santé", "médicament", "médication", "docteur", "infirmier", "infirmière", "médecin", "médical", "pharma", "chirurgien", "chirurgie"),

"covid19" = c("pandémie", "épidemie", "covid", "corona", "sras-cov-2", "2019-nCoV"),

"gov_spend" = c("impôt", "taxe", "emploi", "déficit", "dette publique", "dette fédérale", "dépenses du gouvernement", "dépenses gouvernementales", "dépenses publiques", "dépenses fédérales", "équilibre budgétaire", "équilibrer le budget"),

"crime" = c("crime", "criminalité", "fusillade", "coup de feu", "tuerie", "fusil", "arme", "prison", "gangs de rue"),

"china" = c('chine', 'xi jinping', ' pcc ', 'chinois', 'hong kong', 'global times',
'xinhua', "people's daily"),

"michaels" = c("spavor", "kovrig", "wanzhou", "michaels"),

"climate" = c("environnement", "climat", "carbone", "gaz à effet de serre", "accord de paris", "plafonnement des émissions", "steven guilbeault", "énergies fossiles", "combustibles fossiles", "ajustements de la frontière carbone", "carboneutralité", "carboneutre", "net zéro", "zéro émission", "vze", "co2", "énergie nucléaire", "trans mountain", "pipeline", "oléoduc", "transmountain", "keystone xl", "émissions de gaz", "pollution", "cibles de paris", "interdiction sur les pétroliers", "moratoire relatif aux pétroliers", "pétrole et gaz", "pétrolier et gazier", "pétroliers et gaziers", "pétrolière et gazière", "pétrolières et gazières", "cop26", "énergie propre", "énergies propres", "énergie verte", "énergies vertes", "emplois verts", "technologie verte", "technologies vertes", "technologie propre", "technologies propres", "transition énergétique", "déchets plastiques", "déchets de plastique", "plastique à usage unique", "énergies renouvelables", "électrification"),

"inequality" = c("chômage", "aide sociale", "logement", "accès à la propriété", "embourgeoisement", "gentrification", "inégalité", "écarts de richesse", "retraite", "sans abris", "itinérance", "pauvreté", "moins nantis", "aide alimentaire", "banques alimentaires", "faible revenu", "revenu modeste", "salaire minimum", "revenu de base garanti", "justice sociale", "coût de la vie", "salaire décent", "ultra-riche"),

"foreign_affairs" = c('affaires mondiales', 'affaires internationales', 'politique étrangère', 'chine', 'chinois', 'xi jinping', 'pcc', 'état chinois', 'parti communiste chinois', 'hong kong', 'global times', 'xinhua', "people's daily", 'michaels', 'wanzhou', 'kovrig', 'spavor', 'commerce bilatéral', 'commerce international', 'échanges bilatéraux', 'libre-échange', 'tarifs douaniers', 'quotas sur les importations', 'sanctions internationales', 'sanctions canadiennes', 'canada impose des sanctions', 'nations unies', ' otan ', 'potentiel de marché', 'afghanistan', 'taliban', 'russie', 'operation unifier', 'iran', 'droits humains', 'terroriste', 'terrorisme', 'maintien de la paix', 'engagements internationaux', 'souveraineté', 'conflits internationaux', 'coopération internationale', 'diplomatie', 'diplomatique', 'deterrence', ' onu ',' fmi ', 'fonds monétaire international', 'militaire', 'armée canadienne', 'forces armées canadiennes', 'défense nationale', 'aide internationale', 'ingérence étrangère', 'g7', 'g8', 'g20', 'sécurité internationale', 'réfugié'),

"Indigenous" = c("autochtone", "amérindien", "premières nations", "tombes anonymes", "sépultures non marquées", "aborigène", "pensionnat", "école résidentielle", "écoles résidentielles", "ffada", "métis", "inuit", " itk ", " apn ", "every child matters", "chaque enfant compte", "droits ancestraux", "droits issus de traités", "undrip", "dnudpa", "droits territoriaux", "accès à l'eau potable")

Appendix C: Survey methodology

The Canadian Election Misinformation Project survey includes two waves: a campaign period survey meant to be nationally representative on a weekly basis (with quotas on age, gender, and region) and a postelection recontact wave. The regions were: Atlantic (Newfoundland and Labrador, New Brunswick, Nova Scotia, Prince Edward Island), Quebec, Ontario, and the West (Manitoba, Saskatchewan, Alberta, British Columbia).

The survey was designed on Qualtrics and administered by Dynata. Respondents could take the survey in French or English. Respondents had to be Canadian citizens aged over 18 years old to be able to take the survey. Sampling for the campaign period survey occurred from August 23 to September 20. The postelection survey was administered from September 30 to October 14. 6910 respondents answered the preelection survey, and 2576 respondents answered the post-election survey. We had aimed for samples of 8500 respondents during the campaign and 3000 respondents in the post-election period. Incomplete responses, those who took less than 4.5 minutes to complete the survey, and those who straight-lined matrix table questions were excluded from the analysis.

The comparison between the pre-election and post-election samples and the general population is presented in the following table:

	% population	% pre-election	% post-election
Gender: Female	50.9	49.5	45.0
Gender: Male	49.1	50.5	55.0
Age: 18-34	28.2	28.5	16.7
Age: 35-54	33.6	33.7	38.2
Age: 55+	38.1	37.8	45.0
Region: Atlantic	6.6	6.5	7.3
Region: Quebec	23.2	24.3	14.9
Region: Ontario	38.3	37.9	43.2
Region: West	31.6	31.0	34.5

We created weights for the pre-election survey, the post-election survey, as well as for each true story or misinformation incident. These stories were usually run for a seven-day period. The data is weighted on age and gender within each region, using regional proportions by sex (male, female) and age groups (18-34, 35-54, 55+) as provided by the 2016 Canadian census.

PARTNERS



The Institute for Strategic Dialogue (ISD) is an independent, non-profit organization dedicated to safeguarding human rights and reversing the rising tide of polarization, extremism and disinformation worldwide.

Since 2006, ISD has been at the forefront of analyzing and responding to extremism in all its forms. Their global team of researchers, digital analysts, policy experts, frontline practitioners, technologists and activists have kept ISD's work systematically ahead of the curve on this fast-evolving set of threats. They have innovated and scaled sector-leading policy and operational programmes – on- and offline – to push back the forces threatening democracy and cohesion around the world today.

ISD partners with governments, cities, businesses and communities, working to deliver solutions at all levels of society, to empower those that can really impact change. They are headquartered in London with a global footprint that includes teams in Washington DC, Berlin, Beirut, Amman, Nairobi and Paris.



The Digital Democracies Institute (DDI) at Simon Fraser University is a group of diverse scholars and stakeholders from around the world who collaborate across disciplines, schools, industry, and public sectors to research and create vibrant democratic technologies and cultures.

Their work integrates research in the humanities and data sciences to address questions of equality and social justice. It aims to combat the proliferation of online "echo chambers," abusive language, discriminatory algorithms and mis/disinformation. For this project, DDI will be focusing on how information - regardless of its facticity - comes to feel "true".



Apathy is Boring is a non-partisan charitable organization that was founded in 2004, when a choreographer, a filmmaker, and a fashion photographer met at a party. Troubled by how few of their friends were actively participating in Canada's democracy, they started an online campaign to mobilize youth to vote during the 2004 federal election.

Today, they work year round to support and educate youth to become active and contributing citizens in Canada's democracy. Their vision is a Canada where every young Canadian is an active citizen, and youth are meaningfully engaged in all aspects of the democratic process.

ect. Educate

CPAC,the Cable Public Affairs Channel, is Canada's only privately-owned, commercial free, not for profit, bilingual licensed television service. Created in 1992 by a consortium of cable companies to preserve an independent editorial voice for Canada's democratic process, CPAC provides a window on Parliament, politics and public affairs in Canada and around the world. Since 1992, the cable industry has invested more than \$50 million in CPAC, and today CPAC programming is delivered by cable, satellite and wireless distributors to over 11 million homes in Canada and worldwide via 24/7 webcasting available on this website.



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