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Disinformation and democratic threats: Insights from the 2019 Canadian federal election

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Disinformation Social Media Election Interference Influence Campaigns Democratic Threats **Highlights:**

- Exposure to disinformation has a significant relationship to changes in voting decisions.
- Instagram exposure correlates strongly with changes in participant voting decisions.
- Real news has a limited impact on shifts in voting decisions compared to fake news.
- Believing fake news increases the likelihood of voting decision changes among participants.

Abstract

News and social media shape voter decisions by influencing which political issues receive attention and how they are presented. This study examines how exposure to social media and disinformation impacted voter behaviour during the 2019 Canadian federal election. A survey was designed and delivered via various social media channels to collect data from Canadians who voted in the 2019 election (N = 182). Participants were presented with a mix of real and fake news headlines, and their responses were analyzed using binary logistic regression to assess the impact of media exposure on voting decisions. The results highlight that time spent on social media, particularly Instagram, significantly increased the likelihood of participants changing their voting decisions. Even when not widely circulated, exposure to fake news profoundly influenced voting decisions among respondents. Interestingly, real news headlines showed no statistically significant effect on voting behaviour, suggesting a reduced impact of credible journalism compared to other media types. This study emphasizes the necessity to create well-informed strategies to mitigate the spread of fake news and enhance media literacy to safeguard democratic processes in the digital age. This research contributes to theoretical advancements in understanding disinformation's impacts and provides relevant insights for policymakers, educators, and media platforms working to mitigate the influence of disinformation.

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1. Introduction

Social media platforms have emerged as an influential tool for shaping public discourse and political behaviour. Social media has provided benefits through the democratization of political communication, offering political actors direct channels to interact with voters, mobilize support, and disseminate electoral messaging without having to navigate through bureaucratic controls and gatekeeping structures (Lachapelle & Maarek, 2015; Pruitt-Santos, 2023; Towner & Muñoz, 2018). However, alongside its benefits, the proliferation of digital platforms has also raised concerns about social media's role in amplifying disinformation and influencing public opinion (Bradshaw et al., 2021; Johnson & Kaye, 2015).

Through a quantitative analysis of survey data collected from Canadian voters after the 2019 Canadian federal election, this research explores the relationship between exposure to disinformation, shifts in voting intentions, and perceptions of political trustworthiness. By analyzing voter responses and behaviours in the context of exposure to disinformation, this study aims to contribute to the broader discourse on the intersection of media influence, political communication, and democratic integrity. Applying agenda-setting theory (McCombs & Shaw, 1972), this study examines how misleading narratives gain prominence, shaping voter concerns and ultimately influencing political attitudes and electoral decisions. Understanding how disinformation shapes voter perceptions and influences electoral outcomes is critical to developing research-informed strategies safeguarding democratic processes.

1.1. Social Media and Political Communication

Social media has become an integral form of political communication (Lachapelle & Maarek, 2015; Towner & Muñoz, 2018). Political figures have increasingly turned to social media platforms such as Facebook, Twitter, and Instagram as a method of communicating political topics to large audiences, mobilizing supporters, shaping their public image, fostering dialogue with citizens, and publicizing their views on politically relevant issues (Klinger & Russmann, 2017; Towner & Muñoz, 2018; Vuckovic, 2023). By communicating directly with social media users through social media networks, political parties can directly influence political public discourse and manage political narratives more effectively (Yang, Chen, Maity, & Ferrara, 2016). The accessibility and low cost associated with social media political communications also allow political parties to communicate information while saving on time, resources, and labour (Klinger & Russmann, 2017; Lachapelle & Maarek, 2015).

In the age of social media, the power that traditional media has in setting the news agenda has drastically reduced. Independent platforms allow the average citizen more influence, challenging the historical monopoly of traditional media (Harder et al., 2017; Meraz, 2009). Mainstream news media delivered through television and newspapers tend to be slower in circulating information as their publication schedule limits them. Social media platforms have no fixed schedule and can publish new information as it occurs. Despite the rise of social media, traditional outlets still play a crucial role in legitimizing news topics, albeit with delayed speed compared to online platforms (Harder et al., 2017).

While the growth of social media has brought forth many advantages in delivering need-to-know political information, it has drawbacks. The immediacy of political communication delivered via social networks can present challenges in managing the rapid spread and potentially inaccurate or misleading information (Lipschultz, 2021). The quality of information delivered via non-journalistic bodies is not bound to the same level of journalistic integrity as conventional news sources. As a result, the political information delivered through social media networks tends to be less credible and more biased (Johnson & Kaye, 2015). Information delivered by non-journalistic sources also lacks transparency and accountability. With the ability to create fake accounts, or cloned accounts of trusted sources, it is possible to spread false political narratives without the same fear of public backlash or legal punishment that a legitimate news source would be subject to (McKay & Tenove, 2021). While social media has democratized political communication, it has also increased the ease of spreading false information.

1.2. Agenda-Setting Theory

Agenda-setting theory explains how media influence extends beyond simply reporting information to shaping which issues the public perceives as most important; this concept is known as issue salience (McCombs & Shaw, 1972). Traditionally, mainstream news organizations controlled this process by selecting, emphasizing, and framing certain topics while downplaying or omitting others. However, the rise of social media has disrupted this dynamic, shifting agenda-setting power from journalists and editors to algorithms and user-driven

engagement metrics (Tsfati et al., 2020). Social media platforms prioritize content that generates high engagement, often amplifying emotionally charged, polarizing, or misleading information over fact-based reporting (Bennett & Livingston, 2018). As a result, the prominence of certain political narratives in digital spaces may be determined more by their ability to provoke reactions than by their factual accuracy, meaning that the issues receiving the most attention may not reflect objective reality (McCombs & Shaw, 1972).

1.3. Disinformation and Fake News

Disinformation and misinformation, though often used interchangeably, represent distinct concepts. Misinformation refers to inaccurate information that is not intentionally created to be misleading or serve any malicious purpose (Derakhshan & Wardle, 2017; Lewandowsky et al., 2013). Disinformation is often created and disseminated to achieve politically desired ends (Bennett & Livingston, 2018). Disinformation may also take on the form of political propaganda, where inaccurate, biased, or misleading information is purposefully created and circulated to influence public opinion, decrease support for an enemy state, justify violence and war, or increase support from allies (Evans, 2014; Murphy & White, 2007; Schudson & Zelizer, 2017).

Fake news represents one of the most recognizable forms of disinformation. It is often crafted to discredit political opponents, sway public opinion, or reinforce ideological divisions (Bader, 2019). This form of disinformation has flourished in an era of declining journalistic trust and the amplification of hyper-partisan voices (Bradshaw et al., 2021; Carlson, 2020). It can take multiple forms, including memes, viral videos, manipulated news articles, misleading social media posts, and algorithmically generated content. No matter what form it takes, the information disseminated is meant to mimic reality in a way that influences political beliefs (Ali & Zain-ul-abdin, 2021).

Disinformation is often used to influence large segments of the population strategically. These strategic initiatives to use disinformation as a weapon are often referred to as influence operations or influence campaigns. Influence operations are planned purposefully and strategically to influence how people perceive the world (Jackson, 2023, July 27). These campaigns can be organized by a single actor or a group of actors who may be state-sponsored or acting independently (Hoffman, 2022, October 20). Influence operations are frequently linked to state-sponsored geopolitical tactics, political warfare, and hybrid conflict strategies that blend cyberattacks, coercive economic measures, and social engineering to destabilize democratic institutions (Sazonov et al., 2022). Starbird et al. (2019) emphasize the need to examine disinformation beyond factual accuracy, recognizing that its true power lies in its ability to reshape political reality and influence electoral decisions.

1.4. Impacts

Disinformation campaigns can polarize entire populations by decreasing respect and admiration for various social groups, discrediting important voices from political conversation, and misrepresenting the views of different communities, often in a way that reduces public support for the group (McKay & Tenove, 2021). The 2016 United States (US) Presidential Election highlights these dangers. After the election, a sophisticated disinformation campaign was discovered and attributed to the Russian Internet Research Agency (IRA). The goal of the IRA's campaign was to sow discord in the US, influence voter support for Donald Trump, and capitalize on the political divide between left- and right-wing political supporters (Ali & Zain-ul-abdin, 2021; Serafino et al., 2024).

The tactics employed by IRA campaigns involved spreading unsubstantiated claims and promoting polarizing conspiracy theories. Additionally, the IRA spread social media posts using politically charged language in attempts to reduce moral support for specific individuals and groups, including political candidates, journalists, political parties, and various social groups (McKay & Tenove, 2021). Many of the narratives associated with previous disinformation campaigns include rhetoric on already polarized issues, including immigration, socially progressive policies, climate change, sexual reproductive rights, and LGBTQ+ rights. These narratives are manipulated to create further polarizing content (Bridgman et al., 2022). Disinformation campaigns sow discord, polarize the population, and reduce sympathy and support for different groups, posing a significant threat to social cohesion.

An ill-informed citizen guided by disinformation may vote differently in elections as unreliable facts direct their inspiration. Citizens make decisions about key social and democratic issues through the information they interact with (Bridgman et al., 2022; McKay & Tenove, 2021). Disinformation can also threaten the democratic process by stoking social unrest around issues that may not require immediate social reaction

(Carlson, 2020). Far-reaching, deceptive facts delivered through disinformation campaigns hold the power to impact democratic outcomes significantly.

1.5. Threats

Canada faces significant threats from foreign disinformation campaigns driven by its NATO membership, global influence, and involvement in geopolitical conflicts. While Russia is well known for using disinformation to undermine trust among NATO states and Western democracies (Sazonov et al., 2022; Tuttle, 2019), the People's Republic of China (PRC) has been the most active foreign actor targeting Canada's democratic systems (Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025). The 2025 Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions found that China used disinformation and covert tactics to further its interests by spreading partisan narratives, supporting specific candidates during nominations, and influencing ethnic media and community networks. The report found no clear evidence that these interference attempts affected the election outcome. However, it noted that the attacks significantly damaged public trust in Canada's democratic institutions and posed ongoing risks to the country's information security.

Beyond direct foreign interference, domestic vulnerabilities in Canada's information environment further amplify the risks posed by disinformation. The public's increasing reliance on untrustworthy sources for political information, driven by mistrust in mainstream media, undermines Canada's democratic systems (Bridgman et al., 2022). Social media platforms often provide information reinforcing pre-existing beliefs, creating echo chambers that limit exposure to diverse perspectives and hinder critical evaluation (Kumar & Krishna, 2014). This dynamic mirrors trends observed in countries like Hungary, where polarization and distrust in public institutions have created fertile ground for fake news, fueling the formation of polarized echo chambers (Szebeni et al., 2021). These online environments inflate disinformation's impact, posing significant challenges to democratic integrity.

American media and political disinformation also shape Canadian public opinion, influencing how citizens perceive political and social issues. Disinformation campaigns in the US have contributed to deep political polarization and growing mistrust in both government and mainstream media (Bridgman et al., 2022; McKay & Tenove, 2021). Narratives from the US have influenced Canadian discourse, fueling polarization and raising doubts about election integrity and claims of electoral fraud (Bridgman et al., 2022). By targeting democratic institutions, election infrastructure, media industries, and citizens, foreign actors can significantly damage a democratic system (Henschke et al., 2020).

1.6. Defences

The 2019 Canadian federal election exposed Canada's weaknesses in countering foreign disinformation and election interference. In response, Bill C-76 limited foreign contributions and increased transparency in digital advertising, while the Critical Election Incident Public Protocol (CEIPP) set guidelines for publicly disclosing credible threats (Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025). However, covert influence tactics, such as those seen in 2019, often bypass regulations by spreading through organic content, community networks, and indirect financial support (Dawood, 2021; Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025).

Addressing these gaps requires a multifaceted approach. Dawood (2021) highlights three key areas for improvement: tightening campaign finance laws, strengthening regulations on disinformation, and expanding media literacy programs to improve public resilience. This includes mandatory disclosure laws, targeted regulations on harmful content, and voluntary agreements discouraging political parties from using misleading or illegally obtained information. Additionally, securing voter data, preventing unauthorized access, and improving coordination between security agencies remain critical cybersecurity priorities.

Disinformation campaigns are not confined to election cycles but are long-term efforts to erode trust in institutions and social cohesion (Bridgman et al., 2022). The 2019 election revealed how foreign actors exploited social divisions, using social media and ethnic media networks to amplify partisan narratives and election-related misinformation (Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025). To counter these tactics, Canada must strengthen coordination between intelligence agencies, digital platforms, and media organizations to enhance real-time disinformation detection. International models, such as the EU's East StratCom Task Force, show how centralized monitoring and rapid response efforts can limit the spread of false information (Vasu et al., 2018). Introducing a similar framework

in Canada could be effective in raising public awareness of foreign influence operations and improving early detection of election-related disinformation.

Public education is also key to reducing the impact of political disinformation, particularly in vulnerable communities. Research suggests misinformation in the 2019 election spread widely through private messaging apps and alternative media, where fact-checking efforts had limited reach (Bridgman et al., 2022; Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025). Expanding media literacy initiatives, especially within communities targeted by foreign influence operations, could help voters critically assess the accuracy of political information (Mourão & Robertson, 2019). Lessons on disinformation should also integrate emotional intelligence training, which has been shown to improve a person's ability to identify manipulative content (Preston et al., 2021).

As social media users navigate an overwhelming volume of content, the ability to critically assess accuracy and legitimacy diminishes, increasing the risk of disinformation shaping voter perceptions (Bermes, 2021). The 2019 election highlighted these risks, as certain foreign influence campaigns relied on organic content and social networks rather than direct political advertising to circumvent regulations (Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions, 2025). When this information is used to inform political decision-making, the integrity of democracy is threatened (Tenove, 2020). This research aims to provide insight into the impact of disinformation on the sample of Canadian voters represented in this study during the 2019 Canadian Federal election. By increasing our understanding of how Canadian social media users interact with different forms of political disinformation, evidence-based responses that aim to reduce the damage of disinformation narratives can be developed. The insights provided by this study can provide significant value to policymakers and the Canadian government in the ongoing effort to increase Canadian resilience against disinformation campaigns.

2. Method

This study is grounded in the theory of agenda-setting and media effects, which posits that the media plays a critical role in shaping public perception and behaviours by highlighting certain issues over others. Central to this theory is the concept that the prominence given to issues in the media influences the importance these issues hold in the public's mind (Harder et al., 2017; Meraz, 2009). The research also draws on theories of disinformation and its impact on democratic processes, highlighting how fake news can distort and manipulate public opinion and decision-making (Bridgman et al., 2022; Carlson, 2020; McKay & Tenove, 2021). These theories are pertinent given the role of social media platforms in reinforcing or challenging these dynamics through algorithms that curate content aligning with users' preconceptions.

This study operationalizes several constructs through measurable variables to empirically test these theoretical frameworks. A series of binary logistic regressions are used to quantify the influence of media exposure on the survey respondent's voter behaviour. This approach models the likelihood of changes in voting decisions based on exposure to different types of media content and different forms of social media. The choice of logistic regression is informed by the dichotomous nature of the dependent variable (change in voting decision).

2.1. Ethics

Simon Fraser University approved the research on February 2, 2020 (decision #20200038). The survey, recruitment method, and method of survey delivery were approved by the REB. All procedures followed were in accordance with the ethical standards of the responsible institutional and national committees on human research ethics and the Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS 2). Informed consent was obtained from all participants included in the study.

2.2. Survey Design and Delivery

This study utilized a quantitative design, analyzing data from a post-election survey distributed to Canadian citizens aged over 18 who voted in the 2019 Canadian Federal Election. Participants were recruited through a criterion sampling strategy, targeting Twitter, Reddit, and Facebook to reach individuals fitting the study criteria. The survey ran from February 6th, 2020, to June 26th, 2020, and garnered 308 responses, with a final analytical sample of 182 respondents after excluding incomplete and non-qualifying submissions.

The survey was modelled after Allcott and Gentzkow's (2017) post-election survey, which examined fake news during the 2016 Presidential election. The current study adapted the survey to generate similar data surrounding fake news delivered during the 2019 Canadian Federal election. Questions were asked regarding

their demographics, political affiliation, and media usage habits. Further, the survey respondents were exposed to 9 headline-related questions (see Table 1). Each respondent was presented with four headlines consisting of real news articles distributed by reputable journalistic news sources in the month leading up to the election. Additionally, four fake news headlines were included in the survey. The news stories corresponding to these headlines were fictitious and contained unverified facts, speculation without merit, and/or extreme exaggeration of real facts; further, they were delivered through actual "news" articles on unreputable websites. Finally, one headline was included as a placebo to control for false recall on survey responses (Allcott & Gentzkow, 2017). The researcher created the placebo headline. In crafting this headline, the researcher aimed to ensure that it was a headline that depicted a story that did not happen but was not far outside the realm of possibility. To prevent bias, the headlines included all parties involved in the election. However, all fake headlines uncovered during the search for fake news headlines relevant to the election were found to be targeting the Liberal Party of Canada. In searching for fake headlines, there appeared to be no available fake news headlines that focused on a political party other than the Liberals.

2.3. Analytic Strategy

Data analysis was conducted using Python in Jupyter Notebook. For this study, four binary logistic regressions were conducted to address four research questions systematically centred around the impact of disinformation on voter behaviour in the Canadian context. Given the relatively small sample size, each question was explored through a separate regression model to ensure clarity and specificity in our findings and to prevent overfitting.

Prior to conducting the logistic regressions, a series of assumption tests were carried out for all variables included in the models. This included checking for multicollinearity using Variance Inflation Factors, calculated with the Pandas and Statsmodels libraries, to ensure that no independent variable was a linear combination of other variables. We also tested for the independence of errors and linearity in the log odds. Gender was systematically included as a control variable across all models in an attempt to reduce the presence of omitted variable bias. Robust standard errors, implemented using Statsmodels, were used in each regression analysis to safeguard against potential violations of standard regression assumptions, such as heteroscedasticity. Additionally, Scipy.stats was used for chi-square tests to examine relationships between categorical variables, and Numpy facilitated the calculation of odds ratios from regression coefficients. This analytic strategy is designed to isolate the effects of disinformation on political decision-making while also addressing the challenges posed by the small sample size. The limitations section details any limitations inherent to this approach.

2.4. Variables

The independent variable used in this study is Change of Vote (CV). CV is derived from responses to whether media exposure influenced participants to switch political parties. Treated as a dichotomous variable (changed/not changed). The independent variables examined in this study were chosen to isolate specific effects and interactions within the broader context of media influence on political decision-making. These variables include:

- *Media Exposure:* This variable comprises a mix of real news, fake news, and a placebo headline, as detailed in Table 2. Survey respondents were asked to recall whether they had encountered these headlines during the election period. Responses were binary and were categorized as 'seen' or 'not seen'.
- Perceived Truth: This measure evaluates the authenticity of the headlines as perceived by participants at the time of the election. The responses were classified into three categories: 'true', 'not true', or 'did not see'.
- *Demographic Variables:* The study incorporated several demographic factors as control variables, including age, gender, education level, household income, and self-identified political affiliation.
- *Media Usage Habits:* Participants provided time estimates on various social media platforms. These variables are treated as continuous and represent the time spent on different social media channels.
- *Primary Source of Information:* This variable identifies the main source of election-related information used by participants during the election period.

Table 1. Real News and Fake News Headlines

Headline	Source	Date	News Type	Variable Name
"Singh says NDP would form coalition with the Liberals to stop Tories"	CTV News	13-Oct-19	Real	Real News 1
"NDP Brampton-Centre candidate apologizes for offensive tweet from 2012"	Global News	17-Oct-19	Real	Real News 2
"Scheer won't say if Conservatives hired consultant to 'destroy' People's Party"	CTV News	19-Oct-19	Real	Real News 3
"Edmonton Strathcona Green Party candidate drops out, asks supporters to vote NDP"	The National Post	16-Oct-19	Real	Real News 4
"Justin Trudeau is trying to rig the election through controlling the Canadian news media"	Canada Proud (Facebook Page)	12-Oct-19	Fake	Fake News 1
"RCMP plans to charge Trudeau with obstruction in SNC Lavalin affair, following federal elections"	The Buffalo Chronicle	17-Oct-19	Fake	Fake News 2
"RCMP source says 'security risk' against Trudeau was contrived by PMO staffers" "Elections Canada attempts to combat	The Buffalo Chronicle	15-Oct-19	Fake	Fake News 3
huge number of non-Canadians on voting register"	The Post Millennial	06-Oct-19	Fake	Fake News 4
"Trudeau's visit to Cuba – PM promises to provide financial aid to the country as US embargo discussions persist"			Placebo	Placebo

3. Results

This research highlights key relationships between media exposure, voter behaviour, and individual characteristics during the 2019 Canadian federal election. First, descriptive statistics are examined to explore trends in demographics, political affiliation, and media usage, while subsequent logistic regression analyses identify significant predictors of voting behaviour changes. These findings reveal how election-related media influenced participant voting behaviours during the 2019 Canadian federal election.

3.1. Descriptive Statistical Analysis

Table 2 presents the demographic characteristics of the survey respondents (N = 190) and their relationship to the dependent variable, Change of Vote (CV). Within the sample, 22% of respondents reported changing their vote based on media influence (n = 40). None of the demographic variables appears to be significantly correlated with CV.

Table 3 illustrates descriptive statistics for political affiliation. This table also reveals information about the relationship between self-identified political alignments and each respondent's vote status change. Political alignment has no significant relationship to CV. Most respondents identify as having a very liberal political alignment (n = 79), followed by slightly liberal (n = 37) and slightly conservative (n = 27). Respondents who report very conservative political alignments make up the second smallest political orientation in the sample (n = 21). Those with political alignments somewhere in between accounted for the smallest political affiliation group (n = 18); however, they represented the group with a higher percentage of people who changed their voting decision. Notably, the distribution of political affiliations represented in this sample does not necessarily represent Canada's voting population.

Table 2. Descriptive Statistics for Demographic Variables

	Change of Vo	te Status	_				
	Vote Not Changed	Vote Changed	Mean	SD	χ2 (p)	df	Cramer's V
Gender					6.64	2	0.19
Man	98 (82.4%)	21 (17.6%)					
Woman	39 (67.2%)	19 (32.8%)					
Non-Binary	3 (100.0%)	0 (0.0%)					
Prefer not to say	2 (100.0%)	0 (0.0%)					
Age ^a			33.86	11.34	4.46	5	4.43
18 – 25	41 (80.4%)	10 (19.6%)					
26 – 34	43 (74.1%)	15 (25.9%)					
35 – 43	28 (75.7%)	9 (24.3%)					
44 – 52	17 (94.4%)	1 (5.6%)					
53+	12 (70.6%)	5 (29.4%)					
Prefer not to say	1 (100.0%)	0 (0.0%)					
Level of Education					5.14	5	0.17
High School	48 (81.4%)	11 (18.6%)					
Trade School	25 (80.6%)	6 (19.4%)					
Undergraduate	45 (72.6%)	17 (27.4%)					
Graduate	19 (76.0%)	6 (24.0%)					
Prefer Not to Say	5 (100.0%)	0 (0.0%)					
Household Income ^a			89,906.83	66,136.63	2.34	5	2.33
Less than \$24,999	23 (79.3%)	6 (20.7%)					
\$25,000 - \$49,999	19 (70.4%)	8 (29.6%)					
\$50,000 - \$99,999	48 (76.0%)	12 (24.0%)					
\$100,000 - \$199,999	36 (81.8%)	8 (18.2%)					
More than \$200,000	8 (72.7%)	3 (27.3%)					
Prefer Not to Say	18 (85.7%)	3 (14.3%)					
Number of Languages					0.98	3	0.07
One	91 (79.8%)	23 (20.2%)					
Two	42 (75.0%)	14 (25.0%)					
Three or More	8 (72.7%)	3 (27.3%)					
Prefer Not to Say	1 (100.0%)	0 (0.0%)					

Note. A Variable with a subscript contains Kruskal Wallace test results

DV: Change of Vote, *p < 0.05

Table 3. Descriptive Statistics for Political Affiliation

	Change of Vo	_			
	Vote Not Changed	Vote Changed	χ2 (ρ)	df	Cramer's V
Political Affiliation			4.70	4	0.16
Very Liberal	66 (83.5%)	13 (16.5%)			
Slightly Liberal	29 (78.4%)	8 (21.6%)			
Neutral	11 (61.1%)	7 (38.9%)			
Slightly Conservative	20 (74.1%)	7 (25.9%)			
Very Conservative	16 (76.2%)	5 (23.8%)			

DV: Change of Vote

The primary source of election information provides insight into which respondents primarily used information source types to keep up to date on election-related information. Overall, there are no significant

relationships between primary source of information and CV (Table 4). The internet (not including social media) is the most common source of information among the survey's respondents; 62.1% of respondents report using this as their primary source of election-related information (n = 113). Social media is the second most frequent primary source; 23.6% of respondents (n = 43) identified that social media platforms are where they primarily go to access election-related information. Family and friends, radio, printed newspapers, in-mail brochures, and political party emails account for the least commonly used forms of political communication.

Table 4. Descriptive Statistics for Primary Source of Election Information.

	Change of Vo	Change of Vote Status			
	Vote Not Changed	Vote Changed	χ2 (ρ)	df	Cramer's V
Primary Source of Information			6.46	7	0.19
Television	8 (72.7%)	3 (27.3%)			
Social Media	34 (79.1%)	9 (20.9%)			
Internet (not including social media)	88 (77.9%)	25 (22.1%)			
Radio	2 (66.7%)	1 (18.6%)			
Newspaper (printed)	2 (66.7%)	1 (18.6%)			
Family and Friends	0 (0.00%)	1 (100.0%)			
Brochures in Mail	3 (100.0%)	0 (0.0%)			
Emails Sent on Behalf of Political Party	5 (100.00%)	0 (0.00%)			

DV: Change of Vote

Table 5 represents descriptive information for all social media usage habit variables. The platforms examined are Twitter, Facebook, Reddit, and Instagram. The use of Facebook is significantly associated with changes in voting decisions among survey respondents (χ 2(4) = 11.06, p = .03, H = 5.11). Among the Facebook user group, one-quarter of respondents reported changing their voting decision based on something they saw in the media (n = 32). Instagram and CV are also significantly correlated (χ 2(4) = 15.94, p = .003, H = 4.97). Together, the significance of Facebook and Instagram highlights the influence of social media on political voting behaviours among respondents.

Table 6 provides descriptive information for all headline variables (real and fake) and their association with changes in political voting decisions. Exposure to specific fake news headlines shows significant associations with changes in voting decisions. Notably, demonstrating a significant relationship with voting changes (χ 2(1) = 0.91, p = .03, V = 0.17), and even more pronounced is the influence of fake news headline 4 (χ 2(1) = 6.61, p = .01, V = 0.19). Fake news headlines 3 and 4 suggest a relationship between a respondent's exposure to these sources of false election-related information and a change in political voting decision.

The most common headline observed by survey respondents during the election was real news 1 (n = 113), as 62.1% of all respondents recalled seeing this news item reported. The least common headline recalled by survey respondents during the time of the election is fake news 3. Only 13.2% of respondents (n = 24) remember this headline. Despite being the least commonly recalled headline, it shows a significant relationship with CV, suggesting that even when fake news is not widely circulated, it can still have a significant negative impact on political minds.

Table 7 provides descriptive information for the perceived truth of headline variables and their association with a change in voting decisions due to information observed in the media. No significant relationships exist between the perceived truth of any headline variables (real or fake). Among those who reported seeing fake news headlines, most participants could discern fact from fiction. 79.2% of those who recall seeing fake news headline 3 were able to identify the information as fictitious, making it the most correctly identified in terms of validity (n = 19). The truth assessment of fake news headline 1 was the least correctly identified, with only 55.9% of respondents correctly assessing it as untrue (n = 33). The findings in Table 7 also highlight that some respondents perceived the real news headlines as untrue, suggesting a lack of trust in mainstream media sources among the survey's respondents.

Table 5. Descriptive Statistics for Social Media Usage Habits

	Change of Vo	te Status					
	Vote Not Changed	Vote Changed	Mean	SD	χ2 (p)	df	Kruskal-Wallis
Time Spent on Twitter			0.96	0.84	1.39	4	0.78
Less than 1 hour	51 (76.1%)	16 (23.9%)					
1 to 2 hours	17 (81.0%)	4 (19.0%)					
2 to 3 hours	4 (80.0%)	1 (20.0%)					
3 to 4 hours	3 (100.0%)	0 (0.0%)					
More than 4 hours	1 (100.0%)	0 (0.0%)					
Time Spent on Facebook			1.22	1.01	11.06*	4	5.11
Less than 1 hour	57 (82.6%)	12 (17.4%)					
1 to 2 hours	21 (61.8%)	13 (38.2%)					
2 to 3 hours	8 (72.7%)	3 (27.3%)					
3 to 4 hours	6 (75.0%)	2 (25.0%)					
More than 4 hours	0 (0.0%)	2 (100.0%)					
Time Spent on Reddit			1.94	1.16	4.74	4	2.04
Less than 1 hour	23 (82.1%)	5 (17.9%)					
1 to 2 hours	57 (89.1%)	7 (10.9%)					
2 to 3 hours	26 (74.3%)	9 (25.7%)					
3 to 4 hours	10 (71.4%)	4 (28.6%)					
More than 4 hours	7 (77.8%)	2 (22.2%)					
Time Spent on Instagram			1.16	0.96	15.94**	4	4.97
Less than 1 hour	51 (76.1%)	16 (23.9%)					
1 to 2 hours	21 (84.0%)	4 (16.0%)					
2 to 3 hours	7 (53.9%)	6 (46.1%)					
3 to 4 hours	1 (16.7%)	5 (83.3%)					
More than 4 hours	0 (0.0%)	1 (100.0%)					

DV: Change of Vote. *p < 0.05, **p < 0.01.

Table 6. Descriptive Statistics for Headline Variables

<u>-</u>	Change of Vot	te Status	_		
	Vote Not Changed	Vote Changed	χ2 (ρ)	df	Cramer's V
Real News 1			0.38	1	0.05
No	56 (81.2%)	13 (18.8%)			
Yes	86 (76.1%)	27 (23.9%)			
Real News 2			0.79	1	0.07
No	108 (80.0%)	27 (20.0%)			
Yes	34 (72.3%)	13 (27.7%)			
Real News 3			0.11	1	0.02
No	86 (76.8%)	26 (23.2%)			
Yes	56 (80.0%)	14 (20.0%)			
Real News 4			0.03	1	0.01
No	107 (78.7%)	29 (21.3%)			
Yes	35 (76.1%)	11 (23.9%)			
Fake News 1			0.94	1	0.07
No	99 (80.5%)	24 (19.5%)			
Yes	43 (72.9%)	16 (27.1%)			

Fake News 2			1.96	1	0.10
No	94 (81.2%)	21 (18.8%)			
Yes	48 (71.6%)	19 (28.4%)			
Fake News 3			5.00*	1	0.17
No	128 (81.0%)	30 (19.0%)			
Yes	14 (58.3%)	10 (41.7%)			
Fake News 4			6.61**	1	0.19
No	123 (82.0%)	27 (18.0%)			
Yes	19 (59.4%)	13 (40.6%)			

DV: Change of Vote.

Table 7. Descriptive Statistics for Perceived Truth of Headlines Variables

	Change of Vo	te Status	_		
	Vote Not Changed	Vote Changed	χ2 (ρ)	df	Cramer's V
Perceived Truth of Real News 1			0.00	1	0.00
Did Not Believe	18 (78.3%)	5 (21.7%)			
Believed	68 (75.6%)	22 (24.4%)			
Perceived Truth of Real News 2			0.00	1	0.00
Did Not Believe	4 (80.0%)	1 (20%)			
Believed	30 (71.4%)	12 (28.6%)			
Perceived Truth of Real News 3			0.05	1	0.03
Did Not Believe	12 (85.7%)	2 (14.3%)			
Believed	44 (78.6%)	12 (21.4%)			
Perceived Truth of Real News 4			0.41	1	0.09
Did Not Believe	12 (85.7%)	2 (14.3%)			
Believed	23 (71.9%)	9 (28.1%)			
Perceived Truth of Fake News 1			0.07	1	0.03
Did Not Believe	25 (75.8%)	8 (24.2%)			
Believed	18 (69.2%)	8 (30.8%)			
Perceived Truth of Fake News 2			2.89	1	0.21
Did Not Believe	35 (79.5%)	9 (20.5%)			
Believed	13 (56.5%)	10 (43.5%)			
Perceived Truth of Fake News 3			2.09	1	0.30
Did Not Believe	13 (68.4%)	6 (31.6%)			
Believed	1 (20.0%)	4 (80.0%)			
Perceived Truth of Fake News 4			0.03	1	0.03
Did Not Believe	12 (63.2%)	7 (36.8%)			
Believed	7 (53.8%)	6 (46.2%)			

DV: Change of Vote.

3.2. Binary Logistic Regression Analysis

The first research question examines the relationship between social media usage and changes in voting behaviour. The research question is: Does time spent on social media influence whether a participant decides to change their vote? To address this question, the following hypotheses were proposed:

 H_1 : Increased time spent on social media is predicted to raise the likelihood of a participant changing their political voting decision.

^{*}p < 0.05, **p < 0.01.

 H_{1_null} : Time spent on social media does not have a statistically significant relationship with the likelihood of a participant changing their political voting decision.

A binary logistic regression was conducted to examine the effects of time spent on various social media platforms on the likelihood that respondents will change their voting decision due to information conveyed through the media. The logistic regression model was statistically significant ($p \le .001$). Additionally, the model's goodness of fit was assessed using the Hosmer-Lemeshow test, which indicated a good fit to the data ($\chi^2 = 0.00$, p = 1.000). This suggests that the model adequately fits the observed data.

Time on Instagram is shown to have a significant association with changes in voting behaviours (β = 0.62, $\rho \le .001$). This implies that increased time on Instagram is strongly associated with an increased likelihood of changing one's vote. For each unit increase in the time spent on Instagram (from none to less than one hour, one hour to two hours, etc.), the odds of changing one's vote increase by 86.58% (exp(β) = 1.87), assuming all other factors in the model are held constant. Thus, the null hypothesis for RQ1 is rejected. As Instagram is a statistically significant predictor of voting decision changes, social media has the potential to influence political decision-making.

Table 8. Social Media Usage Predicting Change of Vote

Variable	Coefficient	OR	Std. Err	z-value	95% CI (Lower, Upper)
Time on Facebook	0.31	1.37	0.17	1.88	(0.99, 1.90)
Time on Twitter	-0.36	0.70	0.22	-1.61	(0.46, 1.08)
Time on Reddit	-0.08	0.92	0.15	-0.57	(0.69, 1.23)
Time on Instagram	0.62***	1.87	0.16	3.89	(1.36, 2.56)
Gender	0.12	1.13	0.25	0.49	(0.70, 1.83)

^{*}p ≤ .001

The second research question examines the relationship between exposure to real news and changes in voting behaviour. The specific research question guiding this regression is: Does exposure to real news have an effect on whether a participant will change their vote? To address this question, the following hypotheses were proposed:

H₂: Greater exposure to real news is predicted to increase the likelihood of a participant changing their voting decision.

 H_{2_null} : Exposure to real news has no statistically significant relationship with changes in a participant's voting decision.

A second binary logistic regression was conducted to examine the exposure to real news headlines on the likelihood that respondents will change their voting decision due to information conveyed through the media. While the model is an overall good fit based on the Hosmer-Lemeshow test (χ^2 = 0.00, p = 1.000)., the logistic regression model is not statistically significant (p = .75). This suggests that, despite the model's good fit, the real news headlines included in this analysis were not impactful in vote changing behaviours.

As indicated in Table 9, there are no statistically significant findings within any of the real news predictors. The null hypothesis is accepted. The real news headlines included in this study do not increase or decrease the chance that a participant will be influenced to change their voting decision. This could suggest that accurate news reporting is less powerful in its effect on a respondent's voting decisions. The inclusion of more real news variables may prove valuable for further analysis.

Table 9. Exposure to Real News Predicting Change of Vote

Variable	Coefficient	OR	Std. Err	z-value	95% CI (Lower, Upper)
Real News 1	0.35	1.42	0.40	0.88	(-0.43, 1.14)
Real News 2	0.41	1.51	0.40	1.03	(-0.37, 1.20)
Real News 3	-0.23	0.80	0.37	-0.61	(-0.95, 0.50)
Real News 4	0.02	1.02	0.43	0.05	(-0.82, 0.86)
Gender	0.19	1.21	0.22	0.87	(-0.25, 0.63)

Reference category = Did not see

The third research question investigates the relationship between exposure to fake news and changes in voting behaviour. The research question asked is: Does exposure to fake news influence whether a participant will change their vote? To address this question, the following hypotheses were proposed:

H₃: Exposure to fake news is hypothesized to increase the likelihood of a participant changing their voting decision.

H_{3_null}: Exposure to fake news does not have a statistically significant impact on a participant's voting decision.

A third binary logistic regression was conducted to examine the effects of exposure to fake news on the likelihood that respondents will change their voting decision due to information conveyed through the media. The logistic regression model itself did not show conventional statistical significance (p = .06). This indicates that the model's predictors, as a whole, may not reliably distinguish between those who change their voting decisions and those who do not. However, the model's proximity to conventional significance levels suggests that it is still worthwhile examining the results. While individual predictors may not have strong effects, their collective influence could be relevant in specific contexts or subsets of the data. The Hosmer-Lemeshow test, used to assess the model's goodness of fit, indicated a good fit to the data ($\chi 2 = 0.00$, p = 1.000), suggesting that the model adequately fits the observed data.

As indicated in Table 10, participants who recall reading a fake news headline 4 are likelier to change their vote than participants who did not see fake news 4 (β = 0.98, p = 0.05). Exposure to this specific fake news headline increases the likelihood of changing one's vote by approximately 166% compared to unexposed (exp(β) = 2.66). Based on this finding, the null hypothesis is rejected. Fake news headlines may influence readers to change their political voting decisions depending on the article.

Table 10. Exposure to Fake News Predicting Change of Vote

Variable	Coefficient	OR	Std. Err	z-value	95% CI
variable	Coefficient	UK	Stu. Em	2-value	(Lower, Upper)
Fake News 1	-0.20	0.82	0.49	-0.41	(-1.15, 0.75)
Fake News 2	0.12	1.13	0.41	0.30	(-0.68, 0.92)
Fake News 3	0.85	2.33	0.50	1.70	(-0.13, 1.82)
Fake News 4	0.98*	2.66	0.50	1.95	(-0.01, 1.97)
Gender	0.24	1.26	0.21	1.14	(-0.17, 0.64)

^{*}p < .05, Reference category = Did not see

The fourth research question explores the impact of belief in fake news on changes in voting behaviour. The research question is: Does believing fake news affect whether a participant will change their vote? To address this question, the following hypotheses were proposed:

H₄: It is hypothesized that those who believe fake news articles to be true are more likely to change their voting decision.

H4_null: Perceiving fake news as true has no statistically significant impact on political voting decisions.

A final binary logistic regression was conducted to examine the likelihood that believing that fake news is true affects respondents' voting decisions due to information conveyed through the media. The logistic regression model was statistically significant (p = .05). Based on the Hosmer-Lemeshow test, the model is deemed a good fit for the data ($\chi^2 = 0.00$, p = 1.000).

As indicated in Table 11, a negative and significant relationship is found between those who were not exposed to fake news 3 (compared to those who both saw and believed the headline) and a change in voting decision (β = -2.82, ρ = .02). The odds of changing one's voting decision are 94% lower for individuals who did not see Fake News 3 compared to those who believed it (exp(β) = 0.06). In this case, not seeing the fake news stabilizes voters' existing decisions significantly, preventing shifts that might occur if they believed the fake news. Based on this finding, the null hypothesis is rejected. Believing that fictitious news is accurate can predict whether a respondent may change their vote due to the influence of the media.

Table 11. The Perceived Truth of Fake News Predicting Change of Vote

Variable	Coefficient	OR	Std. Err	z-value	95% CI (Lower, Upper)
Perceived Truth of Fake News 1					
Did not believe vs. Believed	0.28	1.32	0.71	0.39	(-1.11, 1.67)
Did not see vs. Believed	0.52	1.70	0.58	0.90	(-0.61, 1.66)
Perceived Truth of Fake News 2					
Did not believe vs. Believed	-0.94	0.39	0.63	-1.50	(-2.16, 0.29)
Did not see vs. Believed	-0.75	0.47	0.57	-1.31	(-1.88, 0.37)
Perceived Truth of Fake News 3					
Did not believe vs. Believed	-2.20	0.11	1.28	-1.72	(-4.72, 0.31)
Did not see vs. Believed	-2.82*	0.06	1.21	-2.33	(-5.19, -0.45)
Perceived Truth of Fake News 4					
Did not believe vs. Believed	-0.10	0.91	0.85	-0.11	(-1.80, 1.57)
Did not see vs. Believed	-0.92	0.40	0.75	-1.23	(-2.38, 0.54)
Gender	0.21	1.24	1.00	-0.05	(-0.21, 0.63)

^{*}p < .05

4. Discussion

This study provides insight into how media, particularly social media, shapes political behaviour and democratic processes. A key concern is that disinformation can significantly influence voter decision-making, even when its direct impact on election outcomes remains unclear. For at least some Canadians who participated in this survey, exposure to false or misleading information influenced their voting choices. This underscores the importance of analyzing how media platforms influence which political issues voters prioritize and the broader role of agenda-setting in political discourse.

Our findings indicate that Instagram is the platform most strongly associated with changes in voting decisions. Social media plays a pivotal role in modern political communication, allowing political parties to engage directly with the public and shape discourse (Lachapelle & Maarek, 2015; Towner & Muñoz, 2018; Yang et al., 2016). While this democratization of information can enhance voter awareness, it also facilitates the spread of low-quality and misleading content (Lipschultz, 2021). Agenda-setting theory suggests that media influence extends beyond merely informing the public; it determines which issues receive the most attention and, in turn, shape voter priorities (McCombs & Shaw, 1972). This study highlights a critical concern, showing that exposure to fake news, even when not believed, can significantly influence voting behaviour by amplifying certain political narratives over others. In an algorithm-driven media environment, disinformation exploits agenda-setting mechanisms by elevating misleading content, reinforcing selective issue salience, and shaping electoral decision-making in ways that may not align with objective realities (Bennett & Livingston, 2018; Tsfati et al., 2020). Although changing one's vote based on reliable information is part of informed decision-making, the risk arises when these shifts are driven by disinformation rather than factual reporting.

This analysis has also shown that even infrequently viewed fake news can influence political decision-making. Fake news headline 3, the least recalled by respondents, was the strongest predictor of voting changes, suggesting that social media echo chambers amplify disinformation's effects. By circulating within insular networks, these chambers reinforce biases and accelerate the spread of inaccuracies (Szebeni et al., 2021). Even limited exposure can shape political priorities by repeatedly surfacing certain issues, making them seem more pressing than they are. Echo chambers further intensify this effect by limiting diverse perspectives, amplifying misleading narratives, and suppressing counterarguments (Kumar & Krishna, 2014). This self-reinforcing cycle strengthens the agenda-setting power of disinformation, keeping select topics prominent in public discourse while pushing fact-based discussions to the margins.

The study highlights a significant trend of skepticism among participants toward mainstream media despite its role in providing more reliable and less partisan information. This distrust points to broader challenges within the information ecosystem. Even when presented with factual content, a substantial portion of the public questions its authenticity. Disinformation campaigns exploit this process by undermining trust in traditional media, allowing misleading or partisan narratives to fill the informational void. Over time, such campaigns erode public confidence in media integrity, leaving individuals more vulnerable to alternative narratives, regardless of their factual accuracy. As disinformation gains visibility and repetition within algorithm-driven platforms, it strengthens agenda-setting effects, amplifying certain narratives, deepening polarization,

and reshaping perceptions of institutional legitimacy (Bridgman et al., 2022; McKay & Tenove, 2021; Szebeni et al., 2021). This dynamic heightens the risk of voters becoming trapped in echo chambers, adopting increasingly polarized views, and further distancing themselves from fact-based reporting.

Another potential explanation for this finding provides a far more optimistic outlook on Canadian media literacy. The rise of disinformation and the resulting skepticism toward media sources may encourage individuals to evaluate even factual reports critically. While this heightened caution can lead to distrust of credible sources and rejection of valid information, it may serve as a defence against accepting false narratives. Such vigilance, though potentially obstructive to recognizing truthful content, helps safeguard against the influence of disinformation. However, this over-cautious approach can also hinder the ability of accurate, well-reported news to penetrate divisive ideological bubbles and mitigate polarization. These findings highlight the need for media literacy initiatives that not only enhance critical evaluation skills to detect misinformation but also rebuild trust in traditional journalism as a foundation of informed democratic discourse (Mourão & Robertson, 2019; Preston et al., 2021; Vasu et al., 2018).

The observation that real news headlines did not significantly influence voting decisions in this study suggests that accurate news reporting may have a diminished impact on electoral behaviour compared to other forms of media content. Several factors could explain this phenomenon. First, the saturation of information in digital media environments may dilute the impact of individual news stories, regardless of their veracity, making it harder for any single piece of real news to influence opinions or voting behaviour significantly. Mainstream journalism publishes information at a significantly lower speed than information disseminated through social media platforms. As a result, information circulated with less rigour and critique can reach more media consumers faster, ultimately dominating the digital information environment (Harder et al., 2017). In this landscape, agenda-setting power is often dictated by visibility rather than credibility, allowing sensationalized or emotionally charged content to overshadow fact-based discourse (Tsfati et al., 2020).

Forms of non-journalistic political information delivered through social networks can be tainted with inaccuracy and bias but reach intended audiences more frequently and consistently (Lipschultz, 2021). The constant exposure to a high volume of media content might lead to information overload, where the ability of voters to process and evaluate new information effectively is compromised. This overload can cause real news to be lost amidst the noise of sensationalist or fake news, which is often designed to be more engaging and emotionally charged (Harder et al., 2017; Meraz, 2009). Implementing stricter regulations on social media platforms to curb the spread of misinformation can help ensure that factual content is not overshadowed by fake news. This includes holding platforms accountable for actively monitoring and labelling or removing false information and enhancing the algorithms prioritizing content to ensure quality over sensationalism (Dawood, 2021).

This study also shows that individuals who were not exposed to fake news headline 3 were significantly less likely to change their vote compared to those who believed the misleading content. This finding underscores the stabilizing effect of avoiding exposure to fake news, as it greatly reduces the likelihood of such information influencing voting decisions. This outcome highlights the risks of disinformation in political contexts, where fake news can be a powerful tool for manipulating public opinion and electoral outcomes (Bradshaw et al., 2021). Preventing the circulation of fake news is more effective than relying on post-hoc damage control strategies. However, implementing stricter regulations on social media content raises concerns about infringing on freedom of speech protections. Striking a balance between removing harmful disinformation and preserving legitimate discourse is essential. While beyond the scope of this study, the complexities of this balance must be carefully considered to avoid unintended consequences when formulating media regulation policies.

Disinformation campaigns intended to create polarization within a democratic body do not happen overnight. Rather, these campaigns are a slow and coordinated effort that steadily erodes social cohesion and trust in public institutions over time (Bridgman et al., 2022). Given the findings of this study, disinformation is a threat to Canadian democracy. Canada's national security must respond to disinformation threats promptly and decisively. We must examine how all attacks against Canada's democracy fit together to help us understand whether these attacks work together to serve a larger intended purpose (Starbird et al., 2019). Proactive measures against disinformation not only protect democratic processes but also reinforce national resilience against political disinformation designed to undermine social stability. Agenda-setting theory provides a framework for understanding why these efforts must extend beyond fact-checking alone; disrupting the mechanisms that give misleading narratives their influence is essential to safeguarding electoral integrity.

5.1. Implications for Theory and Practice

This study offers significant implications for theory and practice by advancing our understanding of the relationship between disinformation, social media, and democratic processes. The findings highlight how exposure to disinformation, even at low levels, can disproportionately influence voter behaviours. The diminished impact of real news on electoral decisions suggests a need to refine traditional frameworks, particularly given the role of social media in amplifying content that aligns with users' biases (Kumar & Krishna, 2014). Echo chambers and algorithmic curation exacerbate these dynamics, limiting exposure to diverse perspectives and reinforcing polarization (Szebeni et al., 2021).

Practically, this research underscores the urgent need to address the proliferation of disinformation through media literacy initiatives and regulatory measures. Social media platforms have democratized political communication, allowing for faster and more direct engagement between political actors and the electorate (Lachapelle & Maarek, 2015; Yang et al., 2016). However, this accessibility has also lowered the barriers to disseminating misleading and harmful information, which poses a significant threat to democratic integrity (Lipschultz, 2021; McKay & Tenove, 2021). Efforts to enhance public media literacy should include critical evaluation skills and emotional intelligence, as these have been shown to improve individuals' ability to detect disinformation (Preston et al., 2021). Additionally, fostering trust in credible journalism is essential to counter the erosion of confidence caused by disinformation campaigns (Bridgman et al., 2022).

The evidence that even low-visibility fake news can significantly influence voter decisions highlights the critical role of regulatory and collaborative efforts. Disinformation campaigns thrive within echo chambers, where repeated exposure amplifies their impact (Kumar & Krishna, 2014). To combat this, policymakers and social media platforms must implement content moderation practices, transparency in algorithmic prioritization, and mechanisms to identify and label false information swiftly (Dawood, 2021). International examples, such as the European Union's East StratCom Task Force, demonstrate the value of coordinated efforts to detect and challenge disinformation while promoting public resilience through education (Vasu et al., 2018). The findings emphasize the importance of a sustained and proactive approach to safeguarding democratic processes (Starbird et al., 2019).

5.2. Limitations and Directions for Future Research

This study has several limitations, primarily due to its small, non-random sample size, which increases the likelihood of a type II error and limits generalizability to the broader Canadian voting population. The reliance on social media, particularly Reddit, for recruitment further reduces representativeness. Additionally, a more diverse set of real and fake news articles could enhance the findings by capturing headlines with greater potential to influence political decision-making. Potential misclassification of news items, where real news may not be fully accurate or fake news may contain elements of truth, also poses a challenge.

Despite these limitations, the study demonstrates that fake news can influence voting decisions, though these effects likely interact with other factors such as upbringing, peer influence, and psychological variables. Future research should increase sample size, adopt randomized sampling, include a wider range of news content, and examine additional social and psychological factors to improve the validity and reliability of findings.

5. Conclusion & Practical Implications

This research highlights how disinformation and social media shape voting behaviours within the Canadian voter sample. Our findings reveal that politically charged content on social media platforms significantly influences voting decisions, while the impact of real news is notably weaker. This suggests that the rapid dissemination of information through digital channels may dilute the influence of credible journalism. Agenda-setting theory suggests that media influence extends beyond simply providing information; it also shapes public priorities by determining which issues receive the most attention (McCombs & Shaw, 1972). In social media, this process is no longer controlled by traditional news outlets but by algorithm-driven platforms that amplify content based on engagement rather than accuracy. This study demonstrates how disinformation takes advantage of these dynamics, repeatedly surfacing in digital environments and reinforcing selective issue salience. As misleading narratives dominate online spaces, they shift voter concerns from fact-based discussions to exaggerated or polarizing topics. Even minimal exposure to fake news influences voting decisions, emphasizing how disinformation misleads voters and dictates which political issues seem most urgent or relevant.

Protecting democratic integrity requires a multifaceted approach from policymakers and social media platforms. Strategies should include curbing the spread of fake news, promoting media literacy education, enhancing transparency, and swiftly addressing false claims to rebuild public trust. Given that agenda-setting effects are amplified in algorithm-driven media spaces, interventions must also focus on disrupting the visibility and dominance of misleading narratives while ensuring fact-based reporting remains accessible and prioritized. This study identifies the challenges posed by the current information ecosystem and calls for sustained vigilance and proactive measures to safeguard democratic engagement in the digital age.

Statement of Researchers

Researchers' contribution rate statement:

Conceptualization (RL, RF), Data curation (RL, RF), Formal analysis (RL), Investigation (RL), Methodology (RL), Project administration (RF), Software (RF), Supervision (RF), Validation (RL, RF), Visualization (RL), Writing – original draft (RL), Writing – review & editing (RL, RF)

Conflict statement:

The authors declare that they have no conflict of interest.

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The research was approved by the Simon Fraser University Research Ethics Board's decision #20200038, dated 14/02/2020.

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6. References

- Ali. K., & Zain-ul-abdin, K. (2021).Post-truth propaganda: Heuristic processing of political 2016 news on Facebook during the U.S. presidential election. Journal **Applied** 109-128. Communication Research. 49(1), https://doi.org/10.1080/00909882.2020.1847311
- Allcott, H., & Gentzkow, M. (2017). Social media and fake news in the 2016 election. *Journal of Economic Perspectives*, 31(2), 211–236. https://doi.org/10.1257/jep.31.2.211
- Bader, M. (2019). Disinformation in elections. *Security and Human Rights*, *29*(14), 24–35. https://doi.org/10.1163/18750230-02901006
- Bennett. S. (2018).The disinformation Disruptive and & Livingston, order: communication the decline democratic institutions. 122of European Journal of Communication. 33(2). 139. https://doi.org/10.1177/0267323118760317
- (2021).Information overload sharing: Bermes A. and fake Α transactional news stress mitigating perspective COVID-19. exploring the role of consumers' resilience durina of Retailing 61, 102555. Journal Consumer Services. and https://doi.org/10.1016/j.jretconser.2021.102555
- P. 2020 Bradshaw. S., Bailey, (2021).Industrialized disinformation: Global Н., & Howard, manipulation. inventory organized social media Computational Propaganda the Oxford Internet Institute. https://demtech.oii.ox.ac.uk/wp-content/uploads/sites/12/2021/02/CyberTroop-Report20-Draft9.pdf
- M., Bergeron, T., Bohonos, D., McCov. Bridaman. A., Lavigne. М.. Baker. Burton. A.. Κ.. Hart. Peng, P. (2022). Mis-and disinformation during 2021 M., Lavault, M., Liddar, R.. હ્ય Canadian federal election. Media Ecosystem Observatory. https://osf.io/preprints/ubfmx

- Carlson, M. (2020). Fake news as an informational moral panic: The symbolic deviancy of social media during the 2016 US presidential election. *Information, Communication & Society, 23*(3), 374–388. https://doi.org/10.1080/1369118X.2018.1505934
- Dawood, Y. (2021). Combatting foreign election interference: Canada's electoral ecosystem approach to disinformation and cyber threats. *Election Law Journal*, 20(1), 10–31. https://doi.org/10.1089/elj.2020.0652
- Derakhshan, H. & Wardle, C. (2017). Information disorder: Definitions. In *Understanding and Addressing the Disinformation Ecosystem*. Annenberg School for Communication.
- Evans, G. (2014). Propaganda: World War 1 usages. *History Class Publications*. 10. https://scholarlycommons.obu.edu/cgi/viewcontent.cgi?article=1030&context=history
- Graham, T. (2024, May 16). What does Putin really want in Ukraine? Council on Foreign Relations. https://www.cfr.org/expert-brief/what-does-putin-really-want-ukraine
- Harder, R. A., Sevenans, J., & Van Aelst, P. (2017). Intermedia agenda setting in the social media age: How traditional players dominate the news agenda in election times. *The International Journal of Press/Politics*, 22(3), 275–293. https://doi.org/10.1177/1940161217704969
- Henschke, A., Sussex, M., & O'Connor, C. (2020). Countering foreign interference: Election integrity lessons for liberal democracies. *Journal of Cyber Policy*, 5(2), 180–198. https://doi.org/10.1080/23738871.2020.1797136
- Hoffman, M. (2022, October 10). Fighting disinformation, malinformation, and misinformation in influence operations campaigns. North Atlantic Treaty Organization. https://www.sto.nato.int/publications/STO%20Meeting%20Proceedings/STO-MP-MSG-197/MP-MSG-197-22P.pdf
- Jackson, J. (2023, July 27). What are influence operations and why are we investigating them? The Bureau of Investigative Journalism. https://www.thebureauinvestigates.com/stories/2023-07-27/what-are-influence-operations-and-why-are-we-investigating-them/
- Jacobs, C. S., & Carley, K. M. (2024). WhatIsDemocracy: Finding key actors in a Chinese influence campaign. *Computational and Mathematical Organization Theory*, 30(2), 127–147. https://doi.org/10.1007/s10588-023-09380-9
- Johnson, T. J., & Kaye, B. K. (2015). Reasons to believe: Influence of credibility on motivations for using social networks. *Computers in Human Behavior*, 50, 544–555. https://doi.org/10.1016/j.chb.2015.04.002
- Klinger, U., & Russmann, U. (2017). "Beer is more efficient than social media" Political parties and strategic communication in Austrian and Swiss national elections. *Journal of Information Technology & Politics*, 14(4), 299–313. https://doi.org/10.1080/19331681.2017.1369919
- Kumar, K. & Krishna, G. (2014). Detecting misinformation in online social networks using cognitive psychology. *Human-Centric Computing and Information Sciences*, *4*(1), 1–22. https://doi.org/10.1186/s13673-014-0014-x
- Lachapelle, G., & Maarek, P. J. (2015). Political parties in the digital age: The impact of new technologies in politics. ProQuest Ebook Central.
- Lewandowsky, S., Stritzke, W. G. K., Freund, A. M., Oberauer, K., & Krueger, J. I. (2013). Misinformation, disinformation, and violent conflict. *American Psychologist*, 68(7), 487–501. https://doi.org/10.1037/a0034515
- Lipschultz, J. H. (2021). StopTheSteal on Twitter: Social media and political communication.

 **Advances in Social Sciences Research Journal, 8(6), 56–70. https://doi.org/10.14738/assrj.86.10309
- Meraz, S. (2009). Is there an elite hold? Traditional media to social media agenda setting influence in blog networks. *Journal of Computer-Mediated Communication*, 14(3), 682–707. https://doi.org/10.1111/j.1083-6101.2009.01458.x
- McCombs, M. E., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, *36*(2), 176–187. https://doi.org/10.1086/267990
- McKay, S., & Tenove, C. (2021). Disinformation as a threat to deliberative democracy. *Political Research Quarterly*, 74(3), 703–717. https://doi.org/10.1177/1065912920938143
- Mourão, R. R., & Robertson, C. T. (2019). Fake news as discursive integration: An analysis of sites that publish false, misleading, hyperpartisan and sensational information.

- Journalism Studies, 20(14), 2077–2095. https://doi.org.proxy.lib.sfu.ca/10.1080/1461670X.2019.1566871
- Murphy, D. M., & White, J. F. (2007). Propaganda: Can a word decide a war? *The US Army War College Quarterly: Parameters*, 37(3), 15–27. doi:10.55540/0031-1723.2383.
- Preston, S., Anderson, A., Robertson, D. J., Shephard, M. P., & Huhe, N. (2021). Detecting fake news on Facebook: The role of emotional intelligence. *PLoS One*, 16(3) https://doi.org/10.1371/journal.pone.0246757
- Pruitt-Santos. G. М. (2023). The role media How οf social in political communication: journalists illuminate information Central America's declining alternative in democracies. Atlantic of 1-16. Journal Communication. https://doi.org/10.1080/15456870.2023.2292217
- Public Inquiry into Foreign Interference in Federal Electoral Processes and Democratic Institutions. (2025). *Final report*. Government of Canada. https://foreigninterferencecommission.ca/fileadmin/report_volume_1.pdf
- Sazonov, V., Ploom, I., & Veebel, V. (2022). The Kremlin's information influence campaigns in Estonia and Estonian response in the context of Russian-Western relations. *TalTech Journal of European Studies*, 12(1), 27–59. https://doi.org/10.2478/bjes-2022-0002
- Schudson, M., & Zelizer, B. (2017). Fake news in context. In *Understanding and Addressing the Disinformation Ecosystem*. Annenberg School for Communication.
- Serafino, M., Zhou, Z., Andrade, J. S., Bovet, A., & Makse, H. A. (2024). Suspended accounts align with the Internet Research Agency misinformation campaign to influence the 2016 US election. *EPJ Data Science*, 13(1), 29–19. https://doi.org/10.1140/epjds/s13688-024-00464-3
- Starbird, K., Arif, A., & Wilson, T. (2019). Disinformation as collaborative work: Surfacing the participatory nature of strategic information operations. *Proceedings of the ACM on Human-Computer Interaction*, *3*, 1–26. https://doi.org/10.1145/3359229
- Szebeni, Z., Lönnqvist, J.-E., & Jasinskaja-Lahti, I. (2021). Social psychological predictors of belief in fake news in the run-up to the 2019 Hungarian elections: The importance of conspiracy mentality supports the notion of ideological symmetry in fake news belief. Frontiers in Psychology, 12, 1-17. https://doi.org/10.3389/fpsyg.2021.790848
- C. (2020). Protecting democracy from disinformation: Normative Tenove. threats policy responses. The International Journal of Press/Politics, 25(3), 517-537. https://doi.org/10.1177/1940161220918740
- Towner, T. L., & Muñoz, C. L. (2018). Picture perfect? The role of Instagram in issue agenda setting during the 2016 presidential primary campaign. Social Science Computer Review, 36(4), 484-499. https://doi-org.proxy.lib.sfu.ca/10.1177/0894439317728222
- Tsfati, Y., Boomgaarden, H. G., Strömbäck, J., Vliegenthart, R., Damstra, A., & Lindgren, E. (2020). Causes and consequences of mainstream media dissemination of fake news: Literature review and synthesis. Annals of the International Communication Association, 44(2), 157–173. https://doi.org/10.1080/23808985.2020.1759443
- D. of (2019). Campaigns disinformation: Modern warfare, electoral Tuttle. interference. and Canada's security environment. [Master's Capstone Project, University of Alberta] http://hdl.handle.net/1880/111834
- Vasu, N., Ang, B., Teo, T.A., Jayakumar, S., Faizal, M., & Ahuja, J. (2018). Fake news:

 National security in the post-truth era. (Policy Report 2018). S. Rajaratnam School of International Studies. https://www.rsis.edu.sg/wp-content/uploads/2018/01/PR180313_Fake-News_WEB.pdf
- Vuckovic, (2023).Politicizing, personalizing, and mobilizing in online political communication: Drivers and killers of users' engagement. International Journal Communication, 17, 3033-3053. https://doi.org/1932-8036/20230005
- Yang, X., Chen, B.-C., Maity, M., & Ferrara, E. (2016). Social politics: Agenda setting and political communication on social media. In E. Spiro, & Y. Ahn (Eds.), *Social Informatics* (pp. 330–344). Springer International Publishing. https://doi.org/10.1007/978-3-319-47880-7_20