Misinformation and attitude formation among the Canadian Public

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COPSS-NISS COVID-19 DATA SCIENCE WEBINAR SERIES

FEBRUARY 18
• Elite cues are potent forces
• However, where we get our information is becoming ever-more diffuse
• Notably, information consumption on social media is ever-increasing
• Little formal democratic governance or oversight on social media platforms*
TODAY...

A TALE OF THREE PAPERS

• A Rare Moment of Cross-Partisan Consensus: Elite and Public Response to the COVID-19 Pandemic in Canada
• The causes and consequences of COVID-19 misperceptions: Understanding the role of news and social media
• Infodemic pathways: Evaluating the role that news and social media play in cross-national information transfer
• Wrap up
A Rare Moment of Cross-Partisan Consensus

• How do politicians’ cues impact the mass public response to the pandemic?
• Published in the *Canadian Journal of Political science* (April 2020)

• Multi-wave survey
• Twitter and Facebook posts from Members of Parliament
• Google search history in (87) Canadian cities
How did Canadian parties respond to COVID-19?

- 33,124 Member of Parliament tweets from January to April
- Keyword-based and manual review for themes
- No denial or downplaying
Did partisans respond to these elite cues?

- No difference in perceived severity or social distancing practices by partisanship
Double check with Google search data

- Dense and large cities
- More educated and wealthy cities
- Conservative vote not a useful explanatory variable
A Rare Moment of Cross-Partisan Consensus

Bottom line

• Elites provide strong cues and increasingly use social media to signal positions
• Cross-party consensus is a politically powerful tool
• New policy issue may cause people to look to their political leaders for guidance
• Where else might people be getting their information?
The causes and consequences of COVID-19 misinformation

- Where is misinformation about COVID-19?
- What are the consequences of consuming this misinformation?
- Published in the *HKS Misinformation Review* (June 2020)
- Multi-wave survey
- Large Twitter dataset
- Comprehensive Canadian news media dataset
(Debunking) misinfo on social and news media

- 2.25 million tweets from 620,000 likely Canadians
- 8.8 thousand news articles
- Keywords + manual review
What are the consequences of all of this misinfo?

- Survey fielded at the end of the data collection period
- Opposite effects for social and news media
The causes and consequences of COVID-19 misperceptions

BOTTOM LINE

- Misinformation is widespread on social media, although there are many users seeking to debunk it as well.
- Public health recommendations appear far more frequently in news media information streams.
- This information quality differential is dramatically associated with misperceptions, risk evaluations, and social distancing.
Infodemic pathways

- Canadians prefer domestic media sources and political elites are generally disinterested in COVID-19 misinformation
- How then does misinformation enter the public discourse? Where does it come from?
- Tweets, retweets, and large Twitter network
- Multi-wave survey with US information exposure items
Collect all followers (6569634 distinct accounts) for Canadian politicians, journalists, and influencers (1174 accounts).

Check location and description (bio) for Canadian location (747158 accounts).

Pull tweets and retweets since January 1st, 2020 (452,139,692 tweets).

Take 200,000 most active content producers.

Collect all followed accounts (9118496 distinct accounts) into country (approximately 1.6M Canadian and 5.4M U.S. based accounts).

Geolocate each followed account into country.

Collect all content retweeted by top Canadian accounts and classify their country of origin.

Compute descriptive statistics.
Canadians are very exposed to US information

- 55% of all geolocated follows are of US users
- 70% of Canadians follow more US users and 17% follow 10x+ more
How does this impact behaviour?

- 8x more retweets of US-based users
- 53% of retweeted misinfo tweets are from US users
- Dictionary by Evanaga et al. (approx 50% misinfo)
- Canadians also more likely to post original misinfo-related content if they follow more US users
Triangulation with survey self-reports

- Large interaction effect between social media use and U.S. news exposure

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Note: DV = COVID-19 misperceptions; * p < 0.05, ** p < 0.01.

We also find that social media usage is associated with U.S. news exposure among our survey respondents. We estimate model regressing U.S. news exposure on social media usage and our controls. The estimates are provided in Table S4 of the supplementary materials. Social media provides a gateway for Canadians to access U.S. news media.
Infodemic pathways

Bottom line

• Canadians on social media are more exposed to U.S.-based information
• Increased propagation of misinformation and embrace of misperceptions related to COVID-19
• Is this because Canadians care about United States news?
• How to explain misperceptions in a mass population – where do they come from?
• Social media is tool that can amplify misinformation and make
• National media markets and information ecosystems are porous. Relying on “good behaviour” of traditional influencers is imperfect
Need to tackle:
• Mercurial misinformation problem
• Self-reported misperception problems (e.g., Graham 2021)
• Causal problems (e.g., Bail et al. 2019), particularly around self selection
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• And a thank you to funders