

Social Media, Digital News Consumption and Polarization

Ontario 2018

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Introduction

What is polarization?

Polarization and Social Media Usage

Methods

- ▶ Ontario Provincial Election Study
- ▶ Produced by LISPOP
- ▶ Available for public use at
<https://doi.org/10.5683/SP3/VFGL0E>
- ▶ Campaign survey fielded between May 28-June 07, 2018

Key Independent Variables

- ▶ **Primary media source:** individuals who *only* received news about the 2018 Ontario election from **legacy**, **online**, and **social media** sources were coded as such and all others were coded as mixed.
- ▶ **Social media usage:** How often respondents use social media from **never** to **multiple times a day**.
- ▶ And **political interest**, **partisan strength**, and **media diversity**.

Measuring Affective polarization

- ▶ Measuring affective polarization is more difficult in multi-party democracies (Wagner 2021).
- ▶ Therefore, we draw on Wagner's (2021) weighted affective polarization (WAP) measure:

$$Spread_i = \sqrt{\sum_{p=1}^P v_p (like_{ip} - \overline{like}_i)^2}$$

where the mean like scores are also weighted by vote share:

$$\overline{like}_i = \sum_{p=1}^P (v_p * like_{ip})$$

In short this measure calculates the average weighted difference between a respondent's average like score and their like score for each party

Measuring Policy Polarization

- ▶ We create an index of 11 policy items where 0 is the most left-wing position on all issues and 11 is the most right-wing position on all issues.
- ▶ We draw on two measures of policy polarization proposed by Lelkes (2016) and Levendusky and Pope (2011) and tested in Canada by Merkley (2022).
- ▶ These measures examine the bimodality of a distribution of policy preferences (Pfister et al. 2013) and the overlap between two empirical distributions of policy preferences (Pastore and Calcagni 2019).

Bimodality Coefficient

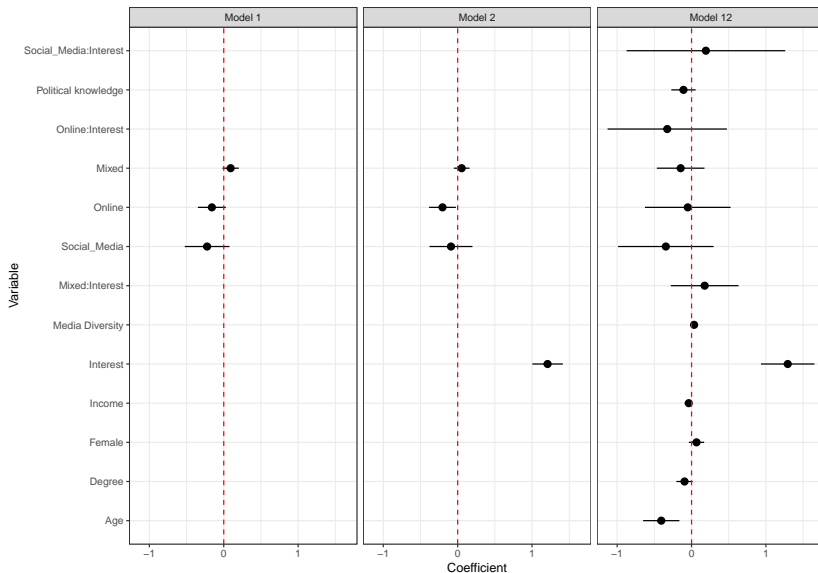
$$BC = \frac{s^2 + 1}{k + 3 * \frac{(n-1)^2}{(n-2)(n-3)}}$$

Overlap Coefficient

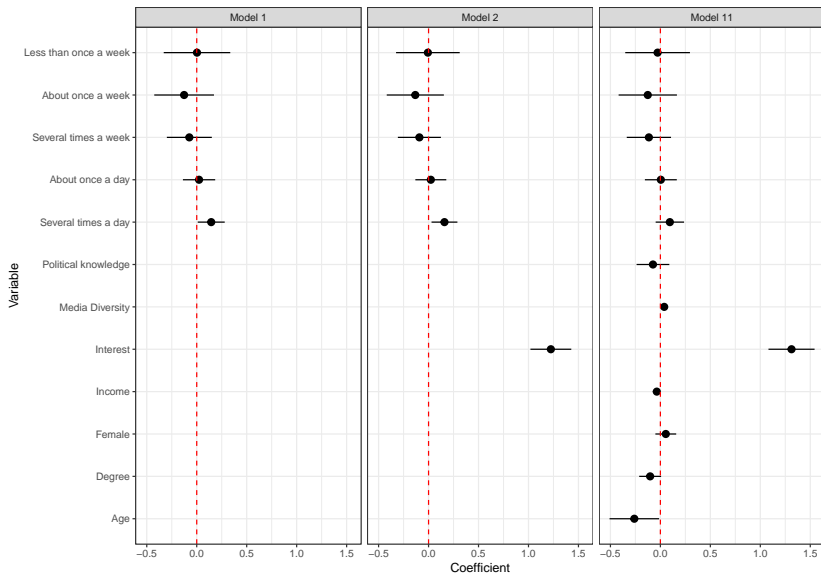
$$OVL = \int_{-\infty}^{+\infty} |f(x) - g(x)| dx$$

Results

Affective Polarization and Primary Media Source



Affective Polarization and Social Media Usage



Notable Trends in Social Media Usage and Affective Polarization

- ▶ Online news consumption is associated with lower levels of affective polarization than legacy media consumption.
- ▶ Interest is positively related to levels of affective polarization.
- ▶ Using social media several times a day is associated with higher levels of affective polarization than never using social media.

Policy Polarization and Primary Media Source - Bimodality Coefficient

Primary_media	Bimodality
Legacy	0.31
Mixed	0.35
Online	0.39
Social_Media	0.31

Primary_media	Bimodality
Low	
Legacy	0.28
Mixed	0.39
Online	0.56
Social_Media	0.29
High	
Legacy	0.58
Mixed	0.40
Online	0.60
Social_Media	NaN

Policy Polarization and Social Media Usage - Bimodality Coefficient

Social_Use2	Bimodality
Never	0.33
Less than once a week	0.33
About once a week	0.29
Several times a week	0.27
About once a day	0.35
Several times a day	0.33

Note no real trends

Policy Polarization - Overlap Coefficient

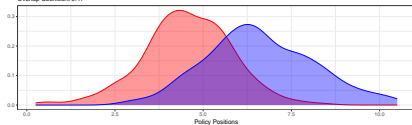
Legacy Media
Overlap Coefficient 0.61



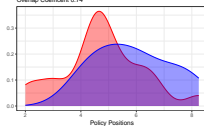
Online Media
Overlap Coefficient 0.45



Uses Social Media Often
Overlap Coefficient 0.47



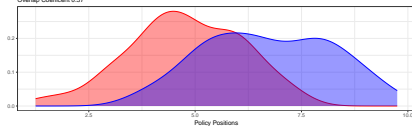
Social Media
Overlap Coefficient 0.74



Mixed Media
Overlap Coefficient 0.42



Uses Social Media Rarely
Overlap Coefficient 0.57



Discussion & Conclusion

References

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