The Effect of the Internet and Social Media on Youth's Political Interests and Voting Intentions

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Abstract

This paper estimates the impact of internet and social media activities on youth's political and federal election interests using panel data from 2004 and 2008 Canadian Election Studies. OLS regression results suggest that general use of internet has been significantly increasing for the youth. I provide suggestive evidence that may be linked to the observed increase in the youth and adults' political and federal election interests compared to seniors.

1. Introduction

Amongst the furore of each new Canadian election, there are two things that will inevitably be seen everywhere in Canada: people captivated by their smart phones, and federal government hopefuls attempting to sway these technological zombies. As social media plays an increasingly integral role in peoples' daily lives, it is interesting to think about the effect that an individual's internet activity has on their voting intentions and political interests. With so many things competing for peoples' time (be it working or studying), it is difficult for people, especially the youth, to be more attentive to federal election news. It is thus plausible that less-informed people due to the lack of interest in federal election news use internet when faced with an uncertain voting decision (Kushin and Yamamoto (2010)).

This paper provides a selective overview of the literature on the relationship between internet, political interests and voting intentions. It also investigates the role of new and traditional (such as television, radio and newspapers) media in shaping voting behavior. More precisely, using questions from Canadian Election Studies (CES) pertaining to voting in federal elections, this paper examines the effect of the internet on the youth's federal election and political interests in 2004 and 2008 Canadian elections. By checking how much attention is paid to TV, radio, newspaper and internet news about the federal election, it is possible to approximate interest in politics. In this paper, I empirically examine (1) the effect of internet on political interest by age group; and (2) the degree to which internet causes the youth to be attentive in federal elections.

I first test whether the youth (ages 18-24) use the internet more than the seniors (ages 65 and older). Unsurprisingly, I find that it is the case; the youth (and adults) are significantly more likely to report higher levels of attention to federal election news using internet than seniors.

Moreover, I find that the internet use for federal election news by youth in comparison to seniors has increased by about 65 percent of a standard deviation from 2004 to 2008.

I then check whether the increasing use of internet (from 2004 to 2008) was correlated to the higher levels of interest in federal elections and political interests for the youth in comparison to the seniors. On average, the youth are less attentive to federal elections and to politics by approximately 38 percent and 40 percent of standard deviation, respectively. But I find that there is a positive relationship between youth's internet activity and their level of interests in federal election news and politics. The level of interest in federal elections by the youth increased by about 26 percent of a standard deviation in 2008. Similarly, the gap in the level of political interests between the youth and the seniors decreased as the youth became more interested to politics by about 19 percent of a standard deviation in 2008.

These findings are consistent with the hypotheses that an increase of internet and social media use possibly led to an increase in the youth's political and federal election interests compared to the seniors.

These results are very important as they could potentially help political parties change the way they "reach" voters: increase awareness of different ways of voting, use different media and platforms (i.e. internet) to share information about government and politics and educate younger age groups for higher voter turnout.

The paper contributes to the literature by introducing new evidence that analyse the impact of internet on political interests by different age groups. See Section 2 for a review of the literature. Furthermore, this paper contributes to the literature by investigating the relationship between new media, age and political interest in Canada, while most of the literature focuses on the U.S. (e.g. Gentzkow 2006).

This study is organized in the following manner. Section 2 explores the role of internet in influencing levels of political interests and political participation based on the existing literature and proposes hypotheses that are tested. Section 3 describes the data. Section 4 examines different indicators of media. Section 5 examines interest in politics and elections. Finally, section 6 concludes.

2. Conceptual Framework

In this section, I present the relevant findings in the literature with a focus on the empirical methodologies adopted.

Literature Review

Before the rise of internet and social media, traditional media dominated.[1] The growing use of internet and social media thus changed the way politicians are reaching voters. The younger age groups are more likely to be exposed to the internet than any other media. Internet users choose the amount of political information obtained from online sources. This may make them more knowledgeable about politics and increase their level of political interests. This could consequently impact their political attitudes and political participation than non-active internet users (Bonchek 1997 and Bimber 1998).

Political participation has been examined during US and Canadian federal elections in a large number of studies. For example, Allcott and Gentzkow (2017) illustrate that social media played a role in the 2016 U.S. election, though not having as large of an impact as anticipated. The important fact which the authors make is that during the election, pro-Trump media was shared over 30 million times, while pro-Clinton stories were only shared 7.6 million times

[1] The television initially provided limited political information possibly causing a drop in voter turnout (Gentzkow, 2006).

(p. 212). Regardless of other information discussed in the paper, the authors state that this statistic indicates a relationship between social media and politics.

Studies based on Canadian elections have shown similar results over the years. For all the Canadian federal elections from 1997 to 2008, the estimated voter turnout rate was about 37% for those aged 18-24 and 47% for those aged 25-30 (Blais and Loewen 2011). Blais et al (2002) find that young Canadians are shown to be less knowledgeable and less interested in electoral politics than older age groups. Stockemer and Rocher (2017) show that there is a strong relationship between (less) interest in voting and (lack of) political knowledge among young adults. These correlations provide potential reasons for the low turnout among the country's young voters. It is thus possible that less-informed people due to the insufficient political knowledge use internet when faced with an uncertain voting decision (Kushin and Yamamoto (2010)).

Young people have been continuously using the internet and social media sites (O'Neill 2007). Many findings exhibit a positive, and statistically significant relationship between social media and political decisions. Spierings and Jacobs (2014) find that when candidates increase their social media presence, "the effect of the number of followers on the number of preferential votes increase (and becomes significant)" (p. 228). The usage of Facebook and Twitter as platforms for political discussions positively influence youth's political interests and their political participation (Pap et al. 2017).[2] Thus, these are evidence that support a connection between social media and political decision when it comes to an increase in social media activity.

[2] O'Connor (2013) explores the social economics behaviour in the financial world. He describes the relationship between social media popularity and stock prices by looking at popular brands and analysing activity on Facebook. The results suggest that social media popularity could be used as a positive indicator of stock price. Although this information concerns the popularity of brands (or voting with one's dollar) a greater understanding of social media's influence on image is created.

Furthermore, Keating and Melis (2017) suggest that internet and social media are more likely to be new channels of political discussions for some of the youth. However, it will not be appealing to youths who no longer have political interests.

To contribute to the existing literature on political interests and internet activity, my study outlines political interests into two components: general political interests and federal election interests. My paper builds upon the foundations provided by Kushin and Yamamoto (2010). They examine the use of online media and political decision making in university students. They do this by examining university students' use of online media for political purposes in the 2008 US federal election. They state that in the preparatory studies, they found that adults between the age of 19 and 29 who attend or have attended a post-secondary institute use social media significantly more than any other age group or level of education (p. 613-614). Thus, young adults attending university are among the most likely to show a relationship between social media and political decision making. My research paper uses Kushin and Yamamoto (2010) as the motivation for why federal elections would be ideal to test voting intentions and political interests in elections due to social media.

Kushin and Yamamoto (2010) fail to show any relationship between social media use and political decision making. However, my research paper disagrees that this definitively holds. One of the main reasons behind the lack of conclusive results in their study is possibly due to the way in which they tested their hypothesis. Their findings were based on university students and therefore are perhaps not generalizable to youth in the US. In contrast, my paper focuses on age-related differences in internet usage, comparing individuals aged 18-24 to older adults. Therefore, Kushin and Yamamoto's paper is useful to this study in motivation rather than results.

Research by the Pew Research Center (2016) shows that social media in the college population is used more than the rest of the country. Pew Research Center (2017) also conducted a statistical study of internet use by age which will be the basis of my understanding of individuals to study. Over three-fourths of adults between the ages of 18 and 29 used internet in 2008, which is over 50% larger than adults of age of 65 and older. To understand the meaning and impact of social media on federal elections, one could assume that the more internet people use, the more likely social media is accessed. The literature and conceptual framework previously discussed will be used as a guide to test the hypotheses.

Hypothesis

There are two series of hypotheses that I will be testing. The first hypothesis is whether an increase of internet and social media activity is correlated to the increase of the youth's level of federal election interests compared to the seniors. This hypothesis is in line with the first and second model specifications in the subsequent results section. The alternative hypothesis is that there is no relationship between internet and the level of federal election interests by the youth in comparison to the seniors.

The second hypothesis is defined as follows: having more access to internet and social media is correlated to the increase of the youth's level of interest in politics compared to the seniors. This hypothesis is in line with the first and third model specifications in the subsequent results section. The alternative hypothesis is that there is no relationship between internet and level of political interests by the youth in comparison to seniors.

3. Data and Descriptive Statistics

This paper relies on data from 2004 and 2008 Canadian Election Studies (CES). The questions pertaining to voting in federal elections are selected in this paper to examine the effect of internet and social media on the youth's political interests during elections. The respondents were randomly selected and completed a post-election survey by telephone. About 30% of the respondents had participated in both 2004 and 2008 CES. Table 1 provides summary statistics (Appendix B). The sample contains about 3,500 observations. I rely on provincial weights throughout to have a representative sample. To vote in a Canadian federal election, a person must be: A Canadian citizen, and 18 years of age or older on election day. Hence, I focus on people who are Canadians and 18 years old or older in the year the survey was conducted. I extract information on participant's employment status, education, year of birth, place of birth, province and political interests. I created three age groups: (1) Youth (18-24 years), (2) Adults (25-64 years) and (3) Seniors (65 years and older). This is to help compare the media influence between the age groups. Appendix A details the exact questions used for each CES waves.

Table 1 provides descriptive statistics. The variable that measures the participants' year of birth has a mean of 1957, and minimum and maximum of 1912 and 1989, respectively. *Interest_fred* is a variable that measures how much participants are interested in the federal election. Its mean is 6.76, and, its minimum and maximum values are 0 and 10, respectively. The standard deviation is 2.6, which shows the data has quite a bit of deviation from its mean. *Interest_poli* is a variable that measures how interested participants are towards politics. Its mean is 6.12, and its standard deviation is 2.6.

Using the conceptual framework previously discussed as a guide, my study examines four forms of political activity: attention to television for campaign information, attention to

radio for campaign information, attention to newspaper for campaign information and attention to internet for campaign information. The measures of television, radio, newspaper and internet attention for federal election are based on a 10 point-scale. Figures 1 to 5 show the distribution of the participants' employment status, attention to TV for federal election news, attention to internet for federal election news, attention to radio for federal election news, and attention to newspaper for federal election news, respectively. The figures illustrate histograms that measure the percentage of the total observations in each bin (Appendix B). Percent scales the height of the bars so that the sum of their heights equals 100. Figure 1 shows that around 51.8% of total number of participants are paid workers. In figure 2, the percentage of participants across each point scale is similarly distributed. The 5^{th} point scale has the highest percentage (17.5%) compared to the others. However, figure 3 shows that 67.9% of the applicants paid 0 attention to news about the 2004 and 2008 federal elections using the internet over the last few days. Similarly, figure 4 shows that 30.63% of the applicants paid 0 attention to federal news using radio and 24.4% of the applicants paid 0 attention to federal news using newspaper (figure 5). These statistics show that the majority of respondents do not pay attention to federal election news. However, for the applicants who are attentive to politics, they are more likely to be using the traditional media (e.g. TV) than internet.

Importantly, the descriptive statistics mentioned above suggest that respondents are being attentive to federal news using new media such as internet. I will thus test whether the use of new media is associated to the level of interests in politics especially for the youth.

4. Political Activity

Equation

Equation (1) tests whether TV, radio, newspaper and internet use changed over time across the three age categories, with and without covariates. The regression models are as follows:

$$(1)\ Y_{it} = \beta_0 + \beta_1 Post_t + \beta_2 Youth_{it} + \beta_3 Adults_{it} + \beta_4 YouthPost_{it} + \beta_5 AdultsPost_{it} + \beta_6 Xit + \varepsilon_{it}$$

Where the dependent variable is the level of attention paid to news about the federal election using a certain media (either TV, radio, newspapers or internet) by *i*th individual at year *t*. The dependent variables are standardized to have a mean of 0 and a standard deviation of 1. All four estimated models include the same independent variables. $Post_t$ is equal to 1 when *t* is 2008. $Youth_{it}$ is individual *i* between the age of 18 and 24 at year *t*. $Adults_{it}$ is individual *i* between the age of 25 and 64 at year *t*. $YouthPost_{it}$ and $AdultsPost_{it}$ are interaction terms. Seniors age group is the baseline category.

$\boldsymbol{X_{it}}$ is a vector of control variables that include the individual *i*'s employment status, highest level of education (a dummy variable indicating whether the individual *i* completed high school or not), place of birth (a dummy variable indicating whether the individual *i* was born in Canada or not) and province dummies. All four models are estimated with and without controls using robust standard errors to account for heteroskedasticity. The models' key findings will be further discussed in the results section.

Social media and internet have changed in both landscape and importance since 2004. The number of internet users have significantly increased as of 2008 (Pew Research Center

2017) and the first "Internet election" took place during the 2008 U.S. presidential election (Greengard 2009). Hence, it is ideal to use 2008 as the post-internet era.

Results

One way of assessing the impact of internet during federal elections is to look at the federal and political interests of the youth compared to seniors. Tables 1 to 4 present the results of my OLS regression analyses (Appendix C). The dependent variables are standardized to have a mean of 0 and a standard deviation of 1. This makes the interpretation of the results easier. Tables 1 to 4 follow the same format. Firstly, column 1 shows estimates of equation (1) without including the control variables (and interaction terms), comparing youth and seniors. Secondly, column 2 shows estimates of the equation including interaction terms and no control variables to compare the youth and the seniors in 2004 and 2008. Finally, column 3 shows estimates of the model with both the interaction terms and control variables. Hence, $Youth$ and $Youth * Post$ are my coefficients of interest.

The estimates presented in Table 1, column 1, indicate that the youth on average pay less attention to news about the federal election on TV by 44.6 percent of a standard deviation compared to the seniors. The estimate is statistically significant at the 1% level. Column 2 adds the interaction terms to the equation which shows that the youth on average started to pay more attention to news about the federal election on TV by about 45 percent of a standard deviation in 2008. The estimate is statistically significant at the 1% level. Similarly, adults pay less attention to news about the federal election on TV than seniors. Moreover, the estimates for *Post*Youth* and *Post*Adults* suggest that respondents are paying more attention to news about the federal election on TV in 2008 than in 2004.

Column 3 shows that the gap in attention between the youth and seniors has significantly decreased over time. This result is robust to the inclusion of the control variables and statistically significant at the 1% level.

Table 2 estimates equation (1) using radio as the dependent variable. Column 1 indicates that youth on average pay more attention to news about the federal election on radio than the seniors. Column 2 adds the interaction terms to the equation. The estimates show that the gap has increased in 2008. The estimate for the youth (in comparison to seniors) is not statistically significant. The inclusion of controls variables (column 3) has no effect on my conclusions.

Table 3 estimates equation (1) using newspaper as the dependent variable. Column 1 indicates that the youth on average pay less attention to news about the federal election on newspaper by 38.9 percent compared to the seniors. The estimate is statistically significant at 1% level. Column 2 adds the interaction terms to the equation which shows that the youth on average started to pay more attention to news about the federal election on newspaper compared to the seniors in 2008. But the estimate is not statistically significant.

In Table 4, I present estimates for internet. Column 1 indicates that the youth on average pay more attention to news about the federal election on the internet by about 67 percent of a standard deviation compared to the seniors. The estimate is statistically significant at the 1% level. Column 2 adds the interaction terms to the equation which shows that the youth on average pay even more attention to news about the federal election on internet by 65 percent of a standard deviation compared to the seniors in 2008. Hence, the gap increased significantly. The estimate is statistically significant at the 1% level. Column 3 shows that this general pattern is repeated even when the control variables are included.

5. Interest in Politics and Election

Equation

The following models test whether the youth have different level of interest in federal elections (equation 2) and politics (equation 3) compared to seniors. The models then further test whether the level of interests changed in 2008 election. This allows me to indirectly assess the relationship between the use of different media, federal election and political interests. The equations are as follows:

$$(2)\ Interest\_fred_{it} = \beta_0 + \beta_1 Post_t + \beta_2 Youth_{it} + \beta_3 Adults_{it} + \beta_4 YouthPost_{it} + \beta_5 AdultsPost_{it} + \beta_6 Xit + \varepsilon_{it}$$

$$(3)\ Interest\_poli_{it} = \beta_0 + \beta_1 Post_t + \beta_2 Youth_{it} + \beta_3 Adults_{it} + \beta_4 YouthPost_{it} + \beta_5 AdultsPost_{it} + \beta_6 Xit + \varepsilon_{it}$$

where the dependent variable for equation 2 is the level of interest in federal election of *i*th individual at year *t*, $Interest\_fred_{it}$. For equation 3, the dependent variable is the level of interest in politics of *i*th individual at year *t*, $Interest\_poli_{it}$. The dependent variables are standardized to have a mean of 0 and a standard deviation of 1. Both estimated models include the same independent variables. $Post_t$ is equal to 1 when *t* is 2008. $Youth_{it}$ is individual *i* between the age of 18 and 24 at year *t*. $Adults_{it}$ is individual *i* between the age of 25 and 64 at year *t*. $YouthPost_{it}$ and $AdultsPost_{it}$ are interaction terms. Seniors age group is the baseline category.

$\boldsymbol{X_{it}}$ is a vector of control variables that include the individual *i*'s employment status, highest level of education (a dummy variable indicating whether the individual *i* completed high school or not), place of birth (a dummy variable indicating whether the individual *i* was born in

Canada or not) and province dummies. Both models are estimated with and without controls using robust standard errors to account for heteroskedasticity.

The issues at the center of the political debate can change over time. If these issues affect different age groups in a different way, then these groups' interest in politics will also be affected differently. For instance, one issue that comes into my mind is the protection of the environment. Pollution and resource depletion are likely to have a larger impact on the life of the younger generations, so this subject is probably of greater interest to people in this age group. Thus, a change in the importance of this issue in the Canadian political debate between 2004 and 2008 is likely to have affected the interest in politics of the young and old respondents in the sample in a different way. Hence, the identification assumption for this paper is that no other shocks (other than internet and social media) affected differently young and old respondents over the time period 2004-2008. I relax this assumption by controlling for participant's employment status, highest level of education, place of birth and province. Details of these measurements and results will be discussed in the following section.

Results

As found previously, there is an increase in internet use by the youth compared to the seniors between the year 2004 and 2008. I now (indirectly) test whether using more media such as internet in 2008 by the youth led to an increase the level of interest in federal elections (equation 2) and level of political interests (equation 3) compared to the seniors. In Table 5, column 1 shows estimates of equation (2) without including the control variables (and the interaction terms). It indicates that the youth on average are less interested in federal elections by about 38 percent of a standard deviation compared to the seniors. The estimate is statistically

significant at the 1% level. The negative estimate for *Post* indicates that the interest in federal elections has declined on average, but the estimate is not statistically significant. Column 2 adds the interaction terms to the equation. I find that the youth (in comparison to seniors) became more interested in federal elections by about 26 percent of a standard deviation in 2008, although the estimate is not statistically significant. The inclusion of controls variables (column 3) increases the precision of my estimates. The estimate for the interaction term is now statistically significant at the 5% level.

Similarly, adults are less interested in federal elections than seniors, but the gap decreased from 2004 to 2008. Moreover, the estimates for *Post*Youth* and *Post*Adults* suggest that respondents are becoming more interested in federal elections in 2008 than in 2004. The inclusion of controls variables (column 3) has no effect on my conclusions.

Column 4 in Table 5 shows estimates of equation (3) without including the control variables (and the interaction terms). It indicates that the youth on average are less interested in politics by about 40 percent of a standard deviation compared to the seniors. The estimate is statistically significant at the 1% level. The negative estimate for *Post* indicates that the interest in politics has declined on average, but the estimate is not statistically significant. Column 5 adds the interaction terms to the equation which shows that the youth on average became more interested in politics by about 19 percent of a standard deviation compared to the seniors in 2008. But the estimate is not statistically significant. Similarly, adults are less interested in politics than seniors, but became significantly more interested from 2004 to 2008. The estimates for *Post*Youth* and *Post*Adults* confirms that respondents are becoming more interested in politics in 2008 than in 2004. Column 6 shows that this general pattern is repeated even when the control variables are included.

The estimates in Table 5 are consistent with the hypotheses that there is a positive correlation between the internet and social media use and the youth and adults' political and federal election interests compared to the seniors.

6. Conclusion

My paper examines the effect of the internet and social media on different aspects of youth's interest in politics. First, I look at different media activity such as TV, newspaper, radio and internet and find that the youth on average pay more attention to news about the federal election on all media, including internet compared to the seniors in 2008. Second, I look at the youth's political and federal elections interests and find that on average they become more interested in 2008, compared to seniors.

Built upon previous studies on social media, and political interests, my study tested models of media use and political interests among different age groups in the 2004 and 2008 Canadian elections. The main conclusion to be drawn from this study is that the usage of internet, to a considerable degree, induces the youth (and adults) to be more attentive in politics and federal elections.

Due to the positive relationship between internet activity and youth's political interests, this might change the way candidates run and how voters behave during elections. Although this study is based on a time where social media was not as popular as today, one could not help but wonder what effects this might have on the youth in recent Canadian elections. Since my paper only analyses the introduction of social media and the rising popularity of internet, further research is needed to examine whether the estimated effects persist when considering additional web applications such as Facebook and Twitter. Moreover, as is always the case with social

media researches, one can never know how accurate any result would be since social media and its impact on us is constantly changing. Hence, further examination is required to better understand their impacts on political decision making.

Appendix A

Personal Information

In what year were you born? In what country were you born? What is the highest level of education that you have completed? Are you currently self employed, working for pay, retired, unemployed or looking for work, a student, caring for a family, or something else? Province.

Media

Using 0-10 scale, how much attention have you paid to news about the federal election on TV over the last few days? Using the same scale, how much attention have you paid to RADIO news about the federal election over the last few days? Using the same scale, how much attention have you paid to news about the federal election in the NEWSPAPERS over the last few days? Using the same scale, how much attention have you paid to news about the federal election in the INTERNET over the last few days?

Interest

Using 0-10 scale, how interested are you in the federal election? Using the same scale, how interested are you in politics generally?

Appendix B

Table 1

Variable	Observations	Mean	Std. Dev.	Min	Max
Year of Survey	3,513	2005.819	1.992118	2004	2008
Year of Birth	3,513	1956.915	15.71997	1912	1989
Employment Status	3,513	2.591462	1.540933	1	11
TV	3,513	5.353333	2.755042	0	10
Radio	3,513	3.354312	3.04855	0	10
Newspaper	3,513	4.161651	3.211059	0	10
Internet	3,513	1.47944	2.592942	0	10
Interest in Federal Election	3,513	6.762212	2.600846	0	10
Interest in Politics	3,513	6.119058	2.614327	0	10
Age	3,513	2.1174	0.4606289	1	3
Born in Canada	3,513	0.8734603	0.332504	0	1
Graduated High School	3,513	0.8957164	0.3056716	0	1

Notes: Table provides a descriptive summary statistics of the data.

Figure 1 - The distribution of the participants' employment status.

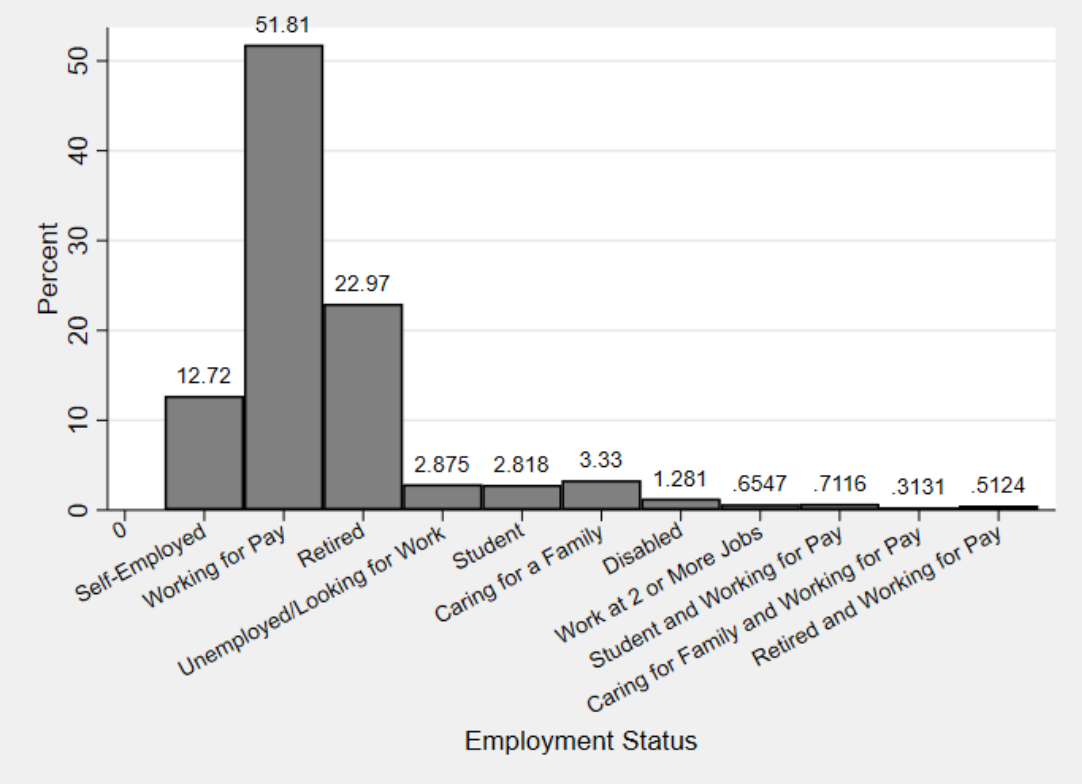


Figure 2 - The distribution of the participants' attention to TV for federal election news.

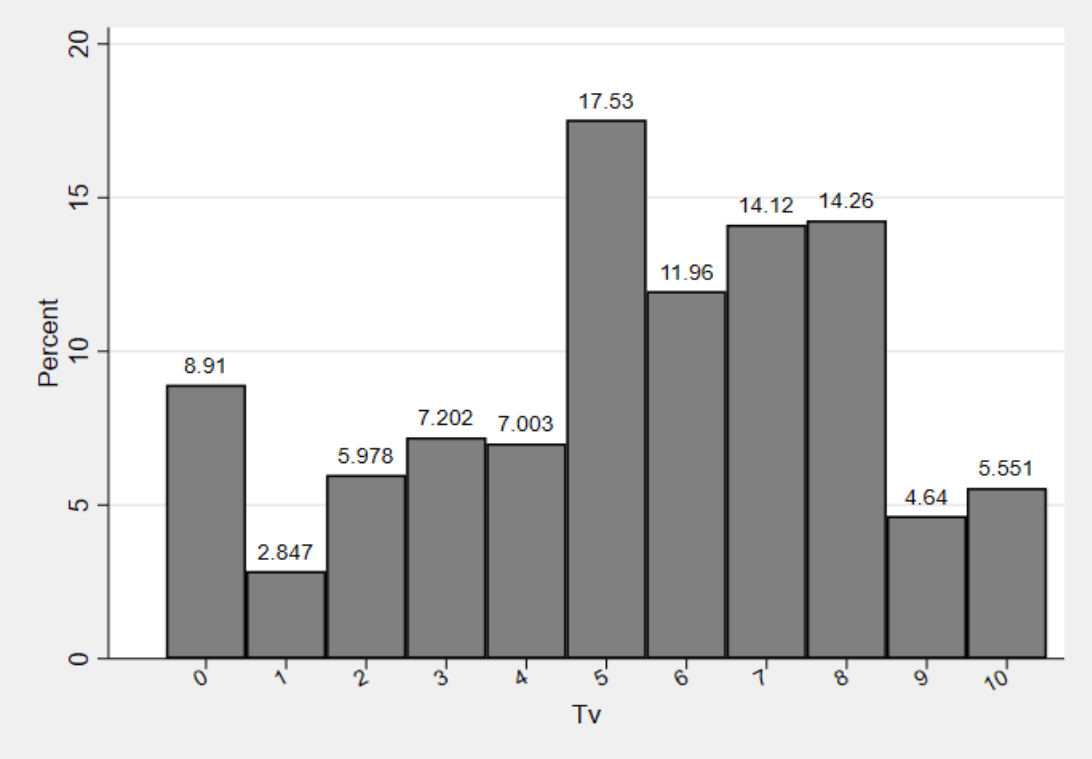


Figure 3 - The distribution of the participants' attention to internet for federal election news.

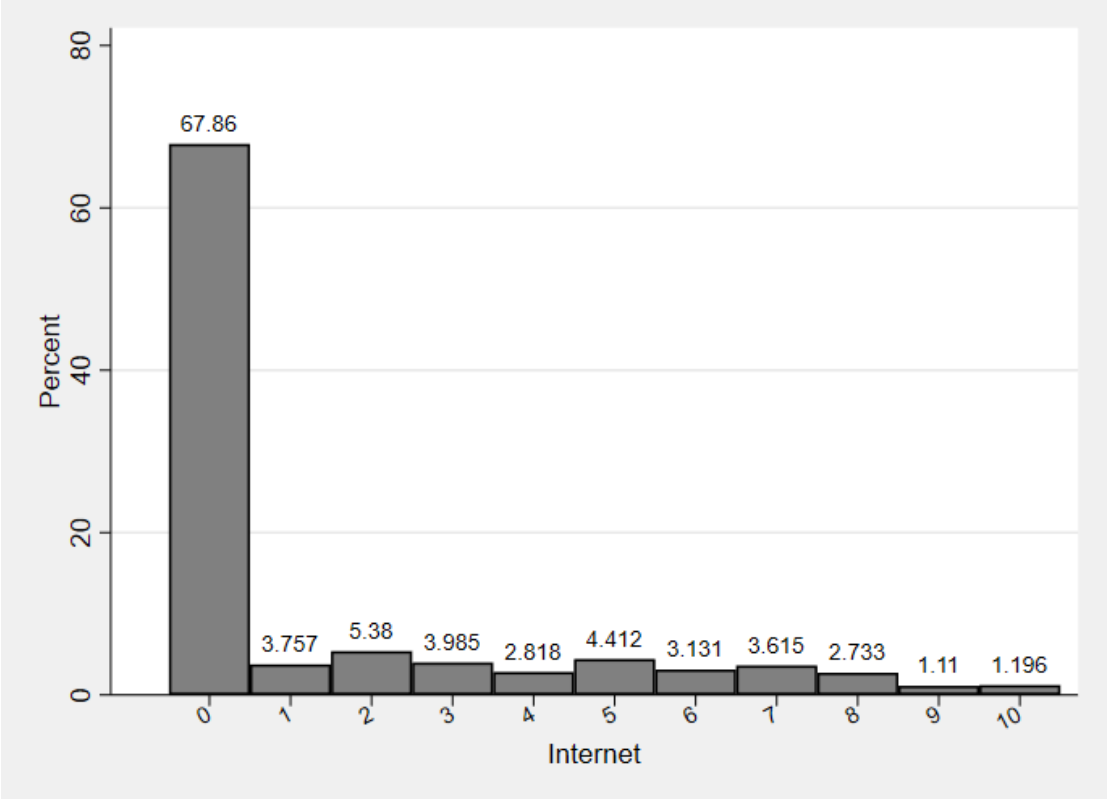


Figure 4 - The distribution of the participants' attention to radio for federal election news.

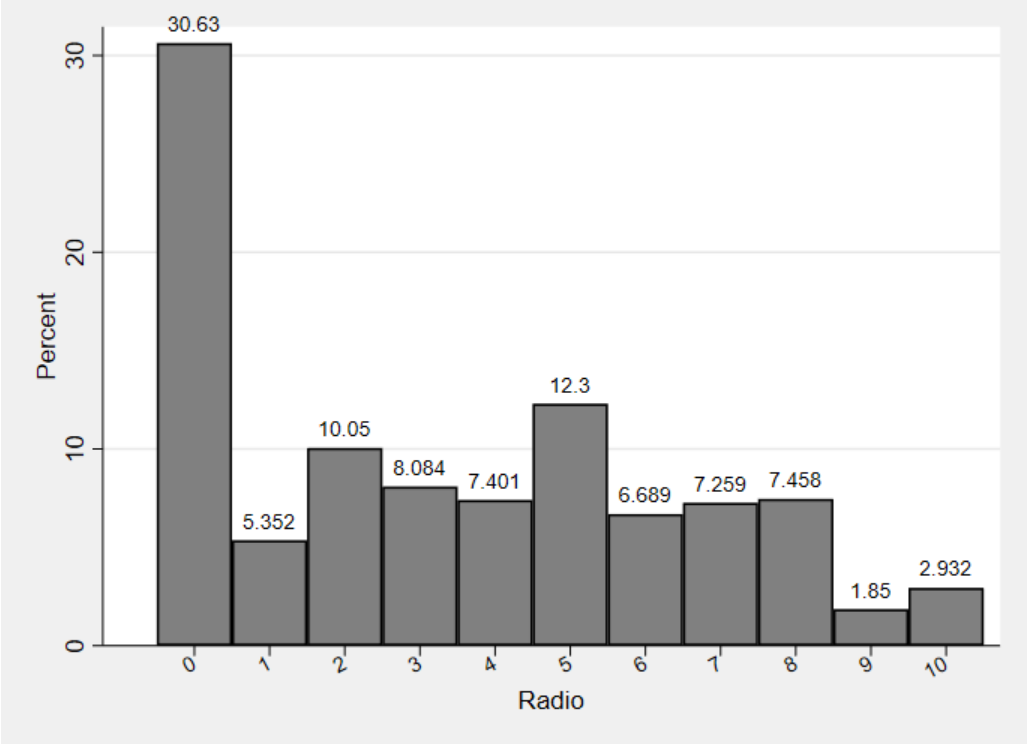
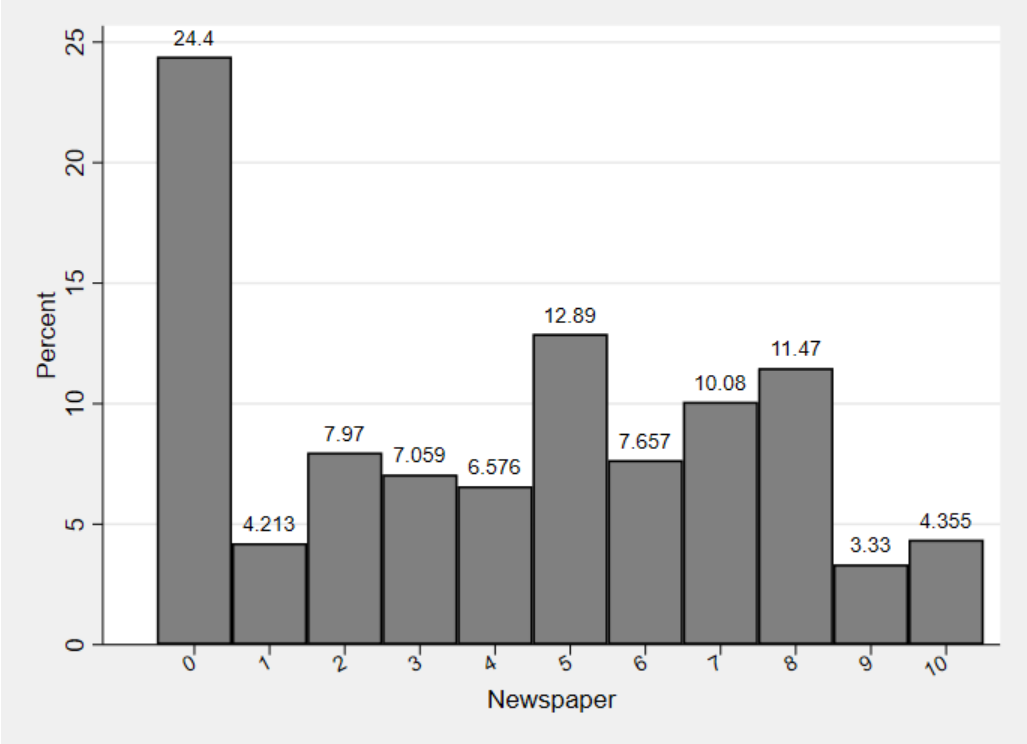


Figure 5 - The distribution of the participants' attention to newspaper for federal election news.



Appendix C

Table 1

Dependent Variable: The level of attention to federal election news using TV			
VARIABLES	(1)	(2)	(3)
Post	0.146***	-0.178**	-0.184**
	(0.0342)	(0.0809)	(0.0802)
Youth	-0.446***	-0.663***	-0.515***
	(0.0851)	(0.110)	(0.131)
Adults	-0.356***	-0.567***	-0.435***
	(0.0453)	(0.0661)	(0.0818)
Post*Youth		0.449***	0.476***
		(0.173)	(0.172)
Post*Adults		0.389***	0.389***
		(0.0897)	(0.0891)
Constant	0.238***	0.420***	0.331**
	(0.0451)	(0.0601)	(0.141)
Observations	3,513	3,513	3,513
R-squared	0.026	0.032	0.047
Born in Canada	Not Controlled	Not Controlled	Controlled
Graduated High School	Not Controlled	Not Controlled	Controlled
Employment Status	Not Controlled	Not Controlled	Controlled
Province	Not Controlled	Not Controlled	Controlled

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Table shows the estimates of equation (1) using an ordinary least squares (OLS) regression with provincial weights. For estimation, the sample is restricted to respondents in 2004 and 2008 federal elections who are Canadians, and 18 years of age or older. Dependent variable is the level of attention to federal election using television (standardized).

Table 2

Dependent Variable: The level of attention to federal election news using radio			
VARIABLES	(1)	(2)	(3)
Post	-0.00854	-0.268***	-0.273***
	(0.0351)	(0.0854)	(0.0848)
Youth	0.0784	-0.0610	-0.254**
	(0.0833)	(0.106)	(0.125)
Adults	0.214***	0.0416	-0.0911
	(0.0470)	(0.0714)	(0.0875)
Post*Youth		0.237	0.286
		(0.180)	(0.178)
Post*Adults		0.319***	0.326***
		(0.0941)	(0.0938)
Constant	-0.172***	-0.0262	0.156
	(0.0473)	(0.0661)	(0.152)
Observations	3,513	3,513	3,513
R-squared	0.007	0.010	0.032
Born in Canada	Not Controlled	Not Controlled	Controlled
Graduated High School	Not Controlled	Not Controlled	Controlled
Employment Status	Not Controlled	Not Controlled	Controlled
Province	Not Controlled	Not Controlled	Controlled

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Table shows the estimates of equation (1) using an ordinary least squares (OLS) regression with provincial weights. For estimation, the sample is restricted to respondents in 2004 and 2008 federal elections who are Canadians, and 18 years of age or older. Dependent variable is the level of attention to federal election using radio (standardized).

Table 3

Dependent Variable: The level of attention to federal election news using newspaper			
VARIABLES	(1)	(2)	(3)
Post	0.0664*	-0.118	-0.135
	(0.0347)	(0.0880)	(0.0874)
Youth	-0.389***	-0.480***	-0.416***
	(0.0842)	(0.109)	(0.130)
Adults	-0.341***	-0.464***	-0.365***
	(0.0480)	(0.0718)	(0.0878)
Post*Youth		0.138	0.199
		(0.175)	(0.177)
Post*Adults		0.228**	0.240**
		(0.0962)	(0.0956)
Constant	0.262***	0.365***	-0.257*
	(0.0481)	(0.0665)	(0.152)
Observations	3,513	3,513	3,513
R-squared	0.019	0.021	0.054
Born in Canada	Not Controlled	Not Controlled	Controlled
Graduated High School	Not Controlled	Not Controlled	Controlled
Employment Status	Not Controlled	Not Controlled	Controlled
Province	Not Controlled	Not Controlled	Controlled

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Table shows the estimates of equation (1) using an ordinary least squares (OLS) regression with provincial weights. For estimation, the sample is restricted to respondents in 2004 and 2008 federal elections who are Canadians, and 18 years of age or older. Dependent variable is the level of attention to federal election using newspaper (standardized).

Table 4

Dependent Variable: The level of attention to federal election news using internet			
VARIABLES	(1)	(2)	(3)
Post	0.350***	0.0507	0.0312
	(0.0349)	(0.0640)	(0.0638)
Youth	0.669***	0.401***	0.00511
	(0.0917)	(0.107)	(0.127)
Adults	0.353***	0.165***	-0.00982
	(0.0387)	(0.0521)	(0.0664)
Post*Youth		0.651***	0.718***
		(0.204)	(0.195)
Post*Adults		0.346***	0.376***
		(0.0758)	(0.0761)
Constant	-0.468***	-0.300***	-0.260*
	(0.0378)	(0.0466)	(0.150)
Observations	3,513	3,513	3,513
R-squared	0.049	0.054	0.087
Born in Canada	Not Controlled	Not Controlled	Controlled
Graduated High School	Not Controlled	Not Controlled	Controlled
Employment Status	Not Controlled	Not Controlled	Controlled
Province	Not Controlled	Not Controlled	Controlled

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Notes: Table shows the estimates of equation (1) using an ordinary least squares (OLS) regression with provincial weights. For estimation, the sample is restricted to respondents in 2004 and 2008 federal elections who are Canadians, and 18 years of age or older. Dependent variable is the level of attention to federal election using internet (standardized).

Table 5

	Dependent Variable: The level of interest in federal elections			Dependent Variable: The level of interest in politics		
VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)
Post	-0.0518	-0.252***	-0.279***	0.0746**	-0.0747	-0.0827
	(0.0345)	(0.0836)	(0.0809)	(0.0349)	(0.0849)	(0.0834)
Youth	-0.379***	-0.509***	-0.492***	-0.401***	-0.497***	-0.403***
	(0.0876)	(0.113)	(0.132)	(0.0922)	(0.119)	(0.140)
Adults	-0.233***	-0.363***	-0.300***	-0.269***	-0.366***	-0.216**
	(0.0460)	(0.0685)	(0.0836)	(0.0468)	(0.0688)	(0.0844)
Post*Youth		0.262	0.374**		0.193	0.241
		(0.180)	(0.183)		(0.189)	(0.187)
Post*Adults		0.240***	0.282***		0.180*	0.181**
		(0.0922)	(0.0895)		(0.0935)	(0.0922)
Constant	0.229***	0.341***	-0.125	0.191***	0.275***	-0.183
	(0.0460)	(0.0628)	(0.152)	(0.0466)	(0.0633)	(0.155)
Observations	3,513	3,513	3,513	3,513	3,513	3,513
R-squared	0.010	0.012	0.077	0.014	0.015	0.052
Born in Canada	Not Controlled	Not Controlled	Controlled	Not Controlled	Not Controlled	Controlled
Graduated High School	Not Controlled	Not Controlled	Controlled	Not Controlled	Not Controlled	Controlled
Employment Status	Not Controlled	Not Controlled	Controlled Controlled	Not Controlled	Not Controlled	Controlled Controlled
Province	Not Controlled	Not Controlled		Not Controlled	Not Controlled	

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Notes: Table shows the estimates of equation (2) for columns (1)-(3) and equation (3) for columns (4)-(6) using an ordinary least squares (OLS) regression with provincial weights. For estimation, the sample is restricted to respondents in 2004 and 2008 federal elections who are Canadians, and 18 years of age or older. Dependent variables are the level of interest in federal election and in politics (standardized).

Bibliography

Allcott, Hunt and Matthew Gentzkow. "Social Media and Fake News in the 2016 Election." *Journal of Economic Perspectives* 31, no.2 (2017): 211–236

Bimber, Bruce. "The Internet and political mobilization: Research note on the 1996 election season." *Social Science Computer Review* 16, no. 4 (1998): 391-401.

Blais, André, and Peter Loewen. *Youth electoral engagement in Canada.* Elections Canada, 2011.

Blais, André, Elisabeth Gidengil, Richard Nadeau, and Neil Nevitte. "Generational Change and the Decline of Political Participation: the case of voter turnout in Canada." *Citizenship on Trial: Interdisciplinary Perspectives on the Socialization of Adolescents, Montreal* (2002).

Bonchek, Mark. "From Broadcast to Netcast - PhD Thesis - Bonchek - 1997." Last modified March 30, 2016. https://www.slideshare.net/mbonchek/from-broadcast-to-netcast-phd-thesis-bonchek-1997

Gentzkow, Matthew. "Television and Voter Turnout." *The Quarterly Journal of Economics* 121, no. 3 (2006): 931-972

Greengard, Samuel. "The first internet president." *Communications of the ACM* 52, no. 2 (2009): 16-18.

Keating, Avril and Gabriella Melis. "Social media and youth political engagement: Preaching to the converted or providing a new voice for youth?" *The British Journal of Politics and International Relations* 19, no. 4 (2017): 877-894

Kushin, Matthew James and Masahiro Yamamoto. "Did Social Media Really Matter? College Students' Use of Online Media and Political Decision Making in the 2008 Election." *Mass Communication and Society* 13, no. 5 (2010): 608-630

O'Connor, Arthur J. "The Power of Popularity: An Empirical Study of the Relationship between Social Media Fan Counts and Brand Company Stock Prices", *Social Science Computer Review* 31, no. 2 (2013): 229–235

ONeill, Brenda. *Indifferent or Just Different?: the Political and Civic Engagement of Young People in Canada.* Ottawa: Canadian Policy Research Networks, 2007.

Pap, Ana, Marija Ham and Karla Bilandžić. "DOES SOCIAL MEDIA USAGE INFLUENCE YOUTH'S INTEREST IN POLITICS?." *International journal of multidisciplinarity in business and science* 4, no. 5 (2018): 84-90. https://hrcak.srce.hr/2054888

Spierings, Niels and Kristof Jacobs. "Getting Personal? The Impact of Social Media on Preferential Voting." *Political Behavior* 36, no. 1 (2014): 215-234

Stockemer, Daniel, and Francois Rocher. "Age, political knowledge and electoral turnout: a case study of Canada." *Commonwealth & Comparative Politics* 55, no. 1 (2017): 41-62.

"Internet use by age." *Pew Research Center*. Last modified January 11, 2017. http://www.pewinternet.org/chart/internet-use-by-age/