Self-interest or solidarity? Older Canadians' preferences towards education spending

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Abstract : Do older Canadians hold different attitudes towards education spending than younger Canadians ? If so, can attachment to neighbourhood help explain these attitudes ? Past research has indicated that individuals who are more attached to their place of living are usually more supportive of government spending in local institutions, such as schools. Using data from the 2015 Canadian Election Study and the 2016 Census of Canada, this research confirms that Canadians aged 65 years and over are less likely to favour increases in education spending, but fails to confirm the moderation effect of place attachment on these attitudes.

Keywords : population ageing, public opinion, education spending, Canada, place attachment

Introduction

Canadians aged 65 and over are expected to become one of the largest voting group in the country in the near future. According to the latest census, members of this age group are already more numerous than Canadians aged 14 and younger, but they should make up about 25% of the population by 2036 (Canada 2016*a*). The process of population ageing will thus rapidly increase the electoral influence of older Canadians.

Whether older people [1] represent a "voting block" is still unclear. Scholars from some of the most rapidly ageing societies—like Germany, Japan and certain American states—have tried to answer this puzzle, but conclusions on this topic remain uncertain. While some studies contend that population ageing would move the preferences of the median voter towards those of a "typical"

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1. In this paper, I will refrain from using the terms *seniors* and *elders* (and the like), and will rather use the terms *older people*, *older citizens* or *older individuals*. The terms *seniors* and *elders* are connoted in Canada. *Seniors* has historically been used to refer to members of the generation preceding the baby boomer generation (Graham 2012), and is often used in Canada to refer to a "benchmark age" for the attribution of different benefits (Institute 2011). The term *elders*, for its part, is "associated [in Canada] with spiritual or community leaders or sages in a First Nations, Métis or Inuit context" (Institute 2011).

older citizen who would mostly be interested in his personal well-being (for instance, Binstock 1974, Fletcher & Kenny 2008), others maintain that not all older voters are self-interested (see, for e.g., Berkman & Plutzer 2004, Goerres & Tepe 2010, Clark, Lambert, Park & Wilcox 2009). The question of the existence of an "old-age voting block" will probably become a popular theme of Canadian electoral studies in the next few years, but before making predictions about the forthcoming voting patterns of the elderly population in this country, an important first step is to better understand the public policy preferences of the members of this demographic stratum. Do older individuals really have different policy preferences than other age groups ? This paper looks into the specific issue of education spending and tries to evaluate whether older Canadians have different preferences than their younger counterparts on this policy. If so, what explains these differences ?

This paper starts by reviewing some of the most important findings about the preferences of older citizens towards policies that do not directly benefit them, such as educational programs. I present one of the reasons—the hypothesis of place attachement—why older citizens are sometimes supportive of education spending, and sometimes not. Place attachment stipulates that individuals who have developed closer ties with their place of living should be more likely to support investments in certain public services, like schools or childcare. This idea has been specified in two different ways : first, more sedentary people—who have lived in the same place for a longer period of time—should be more attached to their community. Second, individuals living in places that are ethnically more homogenous should also be more attached to their community. These two working hypotheses predict that older individuals who are more sedentary or whose communities are more "homogenous" should be more likely to favour investments in education, as opposed to other members of the same age group.

Using data from the 2015 Canadian Election Study and the 2016 Canadian census, I show that older Canadians are indeed less likely to support increases in education spending. However, contrary to my expectations, individuals who have lived longer in the same city are actually less likely to support education spending. That being said, sedentariness still appears to moderate older Canadians' negative attitudes about education spending. Finally, the ethnic composition of Canadian neighbourhoods do not seem to be related to individual opinions on this topic. This is true for all age groups. Despite these somewhat deceiving results, the fact that older Canadians are less likely to support increased spending in education is a puzzle with important policy implications that warrants further scrutiny.

Theory and past research

For long, research on individual policy preferences has hypothesized that members of older age groups were self-interested individuals who only supported policies that reduced their tax burden, unless these policies benefitted them directly (see, for instance, Binstock 1974). On the specific question of education spending, the idea was that older individuals refused to finance higher investments in primary and secondary schools because they could not directly take advantage of these services. More recently, however, researchers have started to relax this hypothesis, and to allow for the more reasonable possibility that older people "are not a monolithic group" (Berkman & Plutzer 2004, 1179). Going back to the question of education spending, older people's opinions on this issue might not be so negative if they feel attached to the schools located in their

neighbourhood, or if they feel solidarity towards younger generations. This new, relaxed idea has been confirmed on several instances in the empirical research literature. I review these findings in the next few lines.

The relationship between age and support for education spending has been explored in several contexts—such as Germany, Switzerland, Japan and the United States—and has reached mixed conclusions. In some cases, older citizens have been found to reject higher education spending, especially if this came with the trade-off of lower investments in old-age services (Sorensen 2013, Busemeyer, Goerres & Weschle 2009). In the Canadian case, researchers have found that attitudes towards education spending were strongly influenced by age, with older Canadians being less likely to support increased investments in this sector (Sorensen 2013, Busemeyer, Goerres & Weschle 2009). These past empirical findings lead me to believe that *older Canadians should be less likely to support increases in education spending*.

Yet, other research have also demonstrated that the individual preferences of older citizens could be influenced by a sense of solidarity towards younger generations (Goerres & Tepe 2010, Clark et al. 2009, Gradstein & Kaganovich 2004), an idea that has been less systematically examined in the Canadian case. Among the reasons why older individuals are willing to favour increased spending in education is the fact that these people might be attached to their place of living. Since good quality schools are seen to improve the living standards of the localities where they are situated, older people who are more attached to their place of living—their neighbourhood or municipality—might be more willing to support investments in the education sector. This leads me to believe that *the relationship between age and support for increases in education spending should be moderated by place attachment*.

Place attachement, or "the bonding that occurs between individuals and their meaningful environments" (Scannell & Gifford 2010, 1), is used by the psychology literature to better understand the individual willingness to contribute "money, time and effort" to one's neighbourhood or community (Bailey, Kearns & Livingston 2010, 210). Place attachment includes a social and a physical dimension. The social dimension refers to attachment towards the people living in one's community, whereas the physical dimension relates to attachment for material components, such as the residence (Hidalgo & Hernandez 2001). Attachement to place has been associated with a greater sense of "stability, familiarity, and security" within the individual (Brown, Perkins & Brown 2003, 259). It is impacted by "changing housing and neighborhood conditions" (Brown, Perkins & Brown 2003, 260).

Place attachment is correlated with several individual determinants, but length of residence is usually considered as the most important factor explaining one's attachment to her neighbourhood (see, for e.g. Bailey, Kearns & Livingston 2010, Brown, Perkins & Brown 2003, Brown, Brown & Perkins 2004). Not only is length of residence associated with "the development of familiarity and a sense of predictability", but it also fosters "spatial routines" and promotes "the development of social ties or networks" between a person and his neighbours (Bailey, Kearns & Livingston 2010, 210). In line with this reasoning, scholars interested in the determinants of support for education spending have argued that more sedentary individuals were more attached to their communities, which made them more likely to support increased investments in the education sector. In the case of older citizens, who are usually less likely to support these programs, sedentariness should attenuate negative opinions towards education spending. Indeed, older people who are more sedentary have had opportunities to become active members of their community : they might have been involved—and are perhaps still involved—in community activities, local associations

or municipal organisations. Having "aged in place" probably makes them more loyal towards local institutions, including schools (Berkman & Plutzer 2004, 1181). Indeed, it would be reasonable to expect that more sedentary older people have seen their children—and their friends' children—grow up in their neighbourhood. If their children and extended family are also established in the same area (which is arguably more likely among more sedentary people), the rationale becomes even more personal. In addition to being loyal to the municipality, these individuals probably want their family to benefit from good quality services (Brady 2013, 86-7). In a more egocentric way, older people who have lived in the same area for a long time might be concerned about the fact that the value of their property could decrease if the quality of local schools decreases (Cattaneo & Wolter 2009, Saito 2017, Clark et al. 2009). If support for education spending is negatively associated with age, and sedentariness is assumed to be a good indicator of place attachment, then *sedentariness should act as a moderator of the relationship between age and support for education spending*.

Place attachment is also related to the level of ethnic diversity of one's place of living. Findings on this question are more mixed than those associated with length of stay, but it seems like individuals who live in more ethnically diverse places tend to be less strongly attached to their place of residence. This is explained by the fact that "high levels of mix are seen as creating impediments to social interaction, integration and cohesion" (Bailey, Kearns & Livingston 2010, 212). Recent empirical findings show that white residents are slightly less attached to their neighbourhood when it is composed of an ethnically diverse population. Attachment levels would thus be affected by diversity only amongst "the more dominant groups", like whites (Bailey, Kearns & Livingston 2010, 229). On the question of support for education spending, one could argue that because they are less attached to their place of living, residents of more ethnically diverse communities should be less likely to support higher school investments. Just like with length of residence, *older individuals who live in less ethnically diverse areas should be more likely to support investments in schools than older people who live in more ethnically diverse localities*. This logic has been confirmed in the United States, where higher shares of non-white school-aged population have been found to be negatively correlated with school spending (Poterba 1997, 1998), even after controlling for other socio-demographic variables such as per capita income. It is unclear however if these results can be exported to the Canadian context. The analyses presented below will bring insight to this question.

The moderating effect of place attachement on the relationship between age and support for education spending is easily conceivable in a context like that of the United States, where school funding is often decided locally. In the American context, citizens have the opportunity to vote on specific "school bond referenda" or express themselves on the level of property taxes (Ladd & Murray 2001, 343). On the contrary, school spending is highly centralized in Canada. In all provinces except Saskatchewan and Manitoba, primary and secondary schools are entirely funded by the state, through "general provincial taxes [and] local property taxes." (Wallner 2014, 76). It could be argued that Canadians do not necessarily make the same association between place attachment and the quality of local schools. This is a very reasonable proposition. However, even if this is the case, the choice of Canada as a case study should reveal a more conservative effect of place attachment on this issue. If place attachement does act a moderator in the relationship between age and support for school investment in the Canadian case, this moderating effect should be even stronger in contexts where the association between place attachment and school funding is more direct.

Data and variables

I verify if older Canadians are less likely to support education spending and test the hypothesis of place attachment using data from the 2015 Canadian Election Study (CES)[2] and the 2016 Census of Canada. The campaign survey of the CES was carried out between September 8th and October 18th, 2015. A total of 4,202 respondents completed the questionnaire, and 71% of them answered the post-election survey, carried out in the weeks following the election. Sampling for the CES telephone survey was made using random digit calling. The online part of the survey was realized in collaboration with Survey Sampling International. The location information was acquired by asking the individual respondents' postal code, which was then "run through Statistics Canada's Postal Code Conversion File (PCCF)" (Northrup 2016, 18) to obtain each respondent's electoral district. The most recent Canadian Census was completed in May 2016. One member of the residence was required to complete the questionnaire, either online or on paper. Some residents answered the questionnaire through an interviewer (Canada 2016*b*).

TABLE 1 – Descriptive statistics, dependent and independent variables

	N	Minimum	Maximum	Mean	Median	St. dev.
Support for educ. spending	1770	0.00	1.00	0.70	1.00	0.46
Old-age	1770	0.00	1.00	0.31	0.00	0.46
Sedentary	1770	1.00	4.00	3.76	4.00	0.55
% visible min.	1770	0.60	92.22	15.93	10.18	17.01

The dependent variable of my analyses is *support for education spending*[3]. This variable is operationnalised using the question "Should the federal government spend more, less, or about the same as now on education ?" from the CES. The responses were recoded to 1 if the individual answered "Spend more", and 0 if the respondent chose "Spend Less" or "About the Same as Now". As expected, a majority of respondents (see Table 1) declared wanting more spending in education. This is not surprising, seeing that the question does not imply a trade-off. In the absolute, it is reasonable for individuals to prefer higher, as opposed to lower, investments in any publicly-provided program. That being said, 3 out of 10 respondents still said that they would prefer education spending to stay the same, or to decrease. This is consistent with Soroka and Wlezien's (2004, 2008, 2010) measure of Canadians' net support for more spending in education. Looking at the evolution in attitudes towards different welfare programs since the mid-1980s, they found that preferences for increased spending in education had gone from about 40% in 1987 to more than 60% in the early 2000s. These levels were obtained using a slightly different survey question : "Keeping in mind that increasing services could increase taxes, do you think the federal government is spending too much, just the right amount, or should be spending more on

2. Data from the 2015 Canadian Election Study were provided by the Institute for Social Research, York University. The survey was funded by the Social Sciences and Humanities Research Council (SSHRC) and Elections Canada, and was completed from the Canadian Election Study Team of Patrick Fournier (Université de Montréal), Fred Cutler (University of British Columbia), Stuart Soroka (University of Michigan), and Dietlind Stolle (McGill University). Neither the Institution for Social Research, SSHRC, Elections Canda, nor the Canadian Election Study Team are responsible for the analyses and interpretations presented here.

3. See the Appendix for a more detailed description of variables and indicators.

[education] ?". As opposed to the question used in the present research, this question should (and does) yield more negative answers because it primes the consideration of higher taxes.

The first independent variable is *old-age*, coded 1 for CES respondents aged 65 years or older, 0 otherwise. We can reasonably assume that individuals aged 65 years and over do not have children in school anymore. At this age, most parents must have seen their children graduate. For this reason, we classify respondents aged 65 years and over as belonging to the older age group [4]. This approach is similar to what is done by Goerres & Tepe (2010) in their analysis of attitudes towards childcare investments. These authors used a 55-years old cutoff, assuming that most people aged 55 years and more did not have children in pre-school anymore.

The second independent variable is *place attachement*, which is operationnalised using two different indicators. These two indicators come from the insights presented in the previous section. Recall that attachement towards the locality varies as a function of the individual's length of residence and of the ethnic diversity of her neighbourhood. More sedentary older people should be more likely to support education spending, as opposed to less sedentary members of the same age group. Similarly, older individuals living in communities where the population is ethnically more homogenous should be more likely to support school spending, as opposed to those living in more diverse localities. The variable *sedentariness* is coded as 1 for individuals who have been living less than one year in the same neighbourhood, 2 for those who have been living in the same city for one to three year(s), 3 for individuals who have been living in the same city for three to ten years, and 3 for those who have been staying in place for more than ten years. Table 1 shows that a majority of respondents have been living at least three years in the same community. Concerning variation in sedentariness as a function of old-age, Table 2 shows that a majority of respondents in both age groups have been living for more than ten years in the same community (77% of those aged less than 65 years old and 86% of those aged 65 years and over). Only 3% of older respondents and 5% of younger respondents have been living in their municipality for just one to three years.

TABLE 2 – Sedentariness by age category

	<1 year	1-3 years	3-10 years	>10 years	Total
Less than 65 y.o.	6	56	202	949	1213
	(0.5%)	(5%)	(17%)	(78%)	(100%)
65 years and over	4	17	55	481	557
	(0.7%)	(3%)	(10%)	(86%)	(100%)

Ethnic diversity is operationnalised as the proportion of visible minority population living in the respondent's federal electoral district [5]. This information was obtained from the 2016 Census.

4. To make sure that the results of my analyses aren't a collateral effect of the decision to split the sample at 65 years old, I ran the same analyses with 60- and 70-years old cutoff points, and with age as a continuous variable. These analyses can be found in the Appendix. They yield substantially the same results.

5. According to Statistics Canada, "Visible minority refers to whether a person belongs to a visible minority group as defined by the Employment Equity Act and, if so, the visible minority group to which the person belongs. The Employment Equity Act defines visible minorities as persons, other than Aboriginal peoples, who are non-Caucasian in race or non-white in colour.' Categories in the visible minority variable include South Asian, Chinese, Black, Filipino, Latin American, Arab, Southeast Asian, West Asian, Korean, Japanese, Visible minority, n.i.e.

Statistics Canada provides aggregate data on declared visible minority status by electoral district [6]. After having computed the proportion of visible minority population in each district, I cross-classified these data with the CES dataset using the information on each respondent's electoral district. In the final dataset, respondents are therefore assigned a variable of the percentage of visible minority population living in their federal electoral district. The mean proportion of visible minority population is 15.65% (see Table 1). The electoral district with the highest proportion of visible minority population is Scarborough North, Ontario (92.22%). The district with the lowest proportion is Bonavista-Burin-Trinity, located in Newfoundland and Labrador (0.60%).

It could be argued that the proportion of visible minority population is an imperfect indicator of the concept of ethnic diversity used in this research. Some could argue that the *difference* between the ethnic origin of the respondent and the modal ethnic origin in this person's electoral district would be more valid. While I agree that such an indicator would be theoretically more valid, in practice very few CES respondents aged 65 years and older belong to a visible minority group. Nevertheless, to make sure that the results obtained in the following sections are not biased by this indicator, I ran the same analyses on a sub-sample of non-visible minority respondents. These analyses yield substantially the same results, and can be found in the Appendix.

I also include in the analyses a series of control variables. These are the individual's level of education, income, gender, vote intention, status of home-ownership and general attitudes towards government spending. Individuals with higher levels of educational attainment or with higher incomes could be more likely to support increased investments in the educational sector because of these two characteristics. In addition, younger generations can be expected to have achieved higher levels of education, and income also varies as a function of age. It is thus important to control for these two variable. In a similar vein, past research has demonstrated that women were more attached to their place of living (for e.g. Brown, Brown & Perkins 2004). Since we know that women are also more supportive of government intervention in Canada (Gidengil, Hennigar, Blais & Nevitte 2005), it is important to add gender as a control variable. Vote intention serves as a proxy for ideology. Left-right ideology is an important control in any study focusing on public policy preferences. Unfortunately, the CES does not contain information on the ideological placement of the respondents for whom we have access to geographical information, which is why I use vote intention (for one of the five main federal parties) as a proxy for ideology. Similarly, general attitudes towards government spending is an important control because some respondents are perhaps favourable to increased spending in all public sectors. Including this variable allows me to investigate the effect of age on support for education spending while keeping constant opinions on spending more generally. Finally, home-ownership has been found to be positively associated with support for education spending (see, for e.g. Cattaneo & Wolter 2009), which is why I control for this factor [7].

('n.i.e.' means not included elsewhere'), Multiple visible minorities and Not a visible minority." (Visible Minority and Population Group Reference Guide, Census of Population, 2016)

6. Census data aggregated by federal electoral districts has been obtained through the Canadian Census Analyser at the University of Toronto : `http://dc1.chass.utoronto.ca/census/index.html` (accessed on February 15th, 2018).

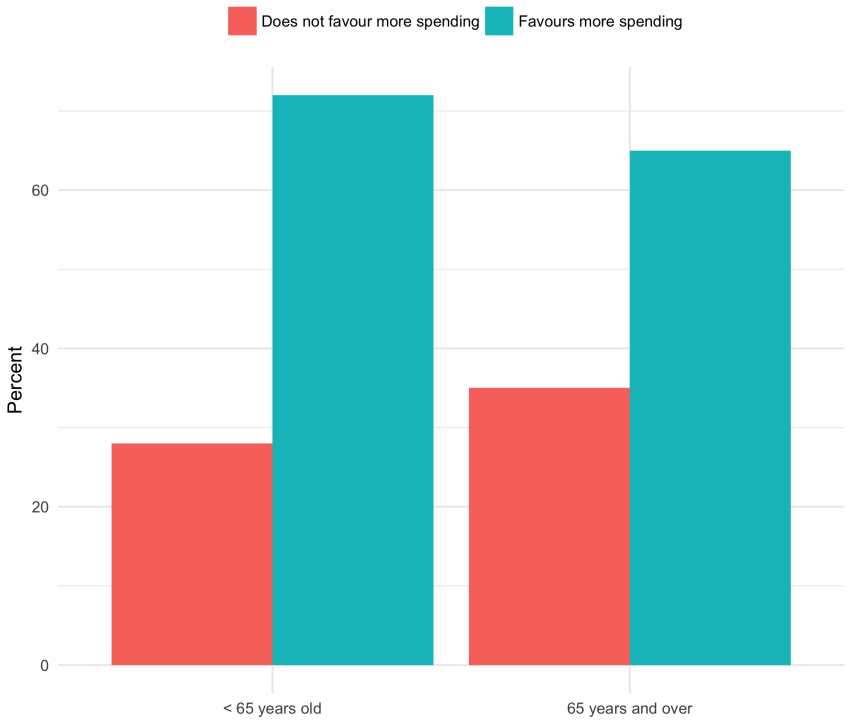
7. An important control variable that is missing from our analysis is parenthood. It could be argued that people who are more supportive of education spending are those who have children. The missing "parenthood" variable could insert an omitted variable biais to our analyses, because parenthood should be positively correlated with support for education spending *and* with old-age (because fertility rates were higher in Canada in the past decades). This could over-estimate the negative relationship between age and support for education spending.

Results

The binary relationship between old-age and support for education spending

Before diving into a multivariate analysis of the determinants of support for education spending, I start by looking at the relationship between our main predictor—old-age—and the outcome, support for greater investments in education. Figure 1 shows the percentage of older individuals (65 years and over) and younger individuals (less than 65 years old) who said they supported higher investments in education, and the percentage of those who didn't. At first glance, there seems to be a small difference between people aged 65 and over and people aged less than 65 years old, the latter favouring increased investments in education in larger proportions than the former. As a matter of fact, a simple chi-squared test allows us to reject the null hypothesis that preferences on this issue are the same across both groups (chi-squared = 8.904, degrees of freedom = 1, p-value = 0.0028).

FIGURE 1 – Attitudes towards education spending according to age category



That being said, the goal of this study is to verify whether two other independent variables—sedentariness and ethnic diversity—moderate this finding. To achieve this purpose, let us now turn

Unfortunately, there is no measure of parenthood in the CES survey (only a measure of "children living at home", which most likely under-estimates the number of older people who are parents). This explains why I don't include this variable in the analysis. However, looking at research on attitudes towards childcare, we can observe that the relationship between age and support for childcare—another youth-related portfolio—is negative even when controlling for parenthood (Goerres & Tepe 2010).

to a multivariate analysis of the relationship between age and support for education spending.

Multivariate analyses

I use logistic regressions to investigate the relationship between age and support for education spending, and to test the hypothesis of place attachment. Logistic regressions are used to estimate a relationship between a series of predictor variables and a binary outcome. First, I verify the relationship between my main variable of interest, *old-age*, the dependent variable, *support for increases in education spending*, while controlling for a set of socio-demographic and attitudinal variables. Model 1, presented in Table 3, shows that individuals aged 65 years and over are indeed less likely to support increased spending in the education sector. A one-unit increase in the age variable (i.e. jumping from the "less than 65 years old" age group to the "more than 65 years old" age group) produces a 0.40 unit decrease in the log of the odds of supporting more education spending. In more intelligible terms, holding everything else constant, the odds of supporting more spending in education is 33% lower among older respondents than among younger ones (odds ratio, 0.67 ; 95% confidence interval, 0.52 to 0.86) [8].

On a different note, women are significantly more likely to support increases in education spending (odds ratio, 1.28), just like people with higher levels of education. On the contrary, higher income individuals judge this issue less favourably. Note however that these two last effects do not reach statistical significance and thus cannot be generalized to the Canadian population. Compared to supporters of the federal Liberal Party, respondents whose intention it was to vote for the Conservative Party are less likely to support increased education spending (o.r., 0.41). This is expected, since the Conservatives are positioned at the right of the Liberals on the ideological spectrum (Cochrane 2010). Supporters of the NDP, a party of the left, are significantly more likely to prefer higher investments in education than individuals who said they would vote for the Liberal Party (o.r., 1.47). Lastly, individuals who are generally more favourable to government spending are unsurprisingly more likely to support spending in education (o.r., 1.26). The opposite is true for home-owners, which runs contrary to our expectations (o.r., 0.62). This is perhaps explained by the fact that in our sample, home-owners are also more likely to be wealthier and to support the Conservative party.

Is it possible for some members of the older age group to be more likely to support increases in education spending than others ? Can place attachement help explain the policy attitudes of older Canadians ? In other words, are the attitudes of older individuals who are more attached to their place of living different than those of others ? In order to answer this question, I add to my regression model the two predictors of place attachment presented in the previous sections, i.e. sedentariness and ethnic diversity.

Model 3 (see Table 3) includes measures of the individual's sedentariness and of the proportion of visible minority population living in her electoral district, and interacts these two variables

8. As can be seen in the supplementary analyses provided in the Appendix, the effect of age as a continuous variable is, as would be expected, weaker than when coded as a dichotomous variable. When age is coded at the 60 years old threshold, the effect of this variable is stronger and reaches statistical significance more often. This is probably due to the fact that there is a larger number of respondents in the 60-plus category than in the 65-plus category. The opposite logic is applicable to the coefficients obtained using the 70 years old cutoff point, which are negative but not significant.

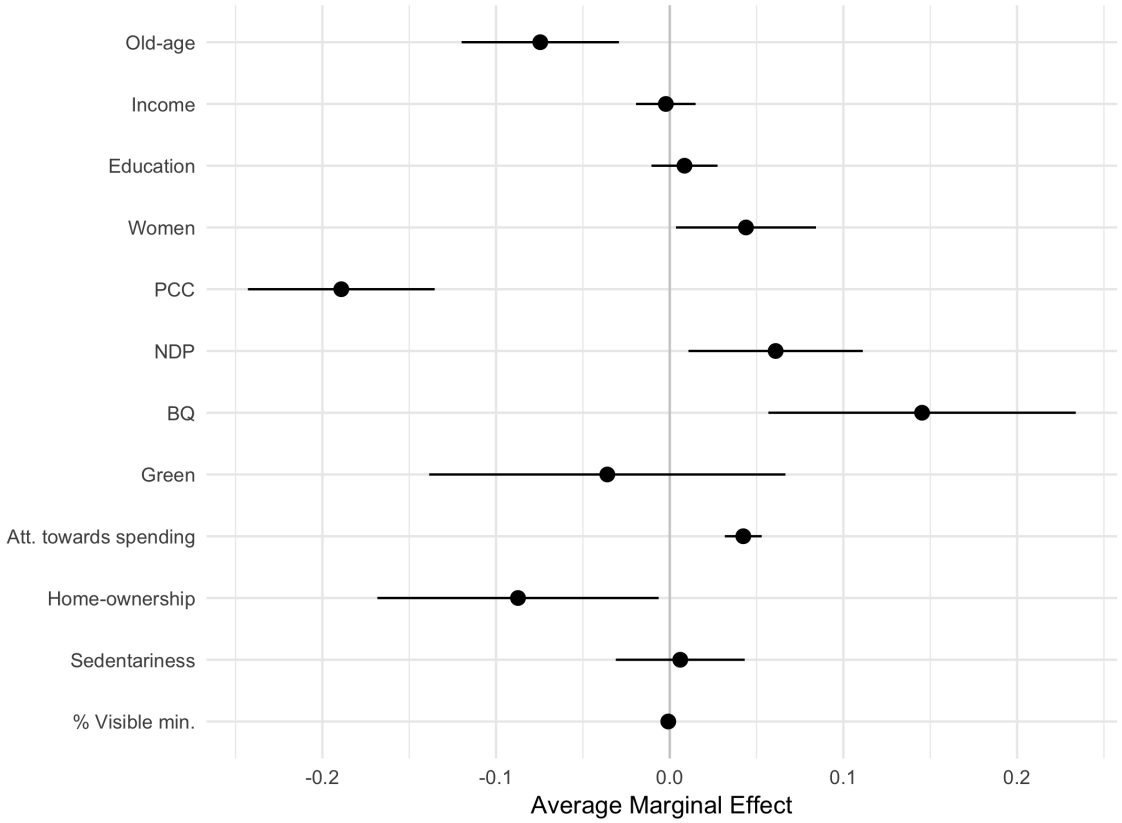
TABLE 3 – The effect of age on support for education spending

	Model 1	Model 2	Model 3
Intercept	−0.33	−0.38	0.06
	(0.37)	(0.49)	(0.56)
Old-age	−0.40**	−0.40**	−1.89*
	(0.13)	(0.13)	(0.76)
Income	−0.01	−0.01	−0.01
	(0.05)	(0.05)	(0.05)
Education	0.03	0.04	0.05
	(0.05)	(0.05)	(0.05)
Women	0.25*	0.24*	0.24*
	(0.11)	(0.11)	(0.11)
PCC	−0.90***	−0.90***	−0.90***
	(0.13)	(0.13)	(0.13)
NDP	0.38*	0.37*	0.37*
	(0.16)	(0.16)	(0.16)
BQ	1.13*	1.09*	1.08*
	(0.40)	(0.40)	(0.40)
Green	−0.18	−0.20	−0.19
	(0.27)	(0.27)	(0.27)
Attitudes towards spending	0.23***	0.23***	0.23***
	(0.03)	(0.03)	(0.03)
Home owner	−0.48*	−0.48*	−0.48*
	(0.23)	(0.23)	(0.24)
Sedentariness		0.02	−0.10
		(0.10)	(0.12)
% visible min.		−0.00	−0.00
		(0.00)	(0.00)
Old-age*sedentariness			0.39
			(0.20)
Old-age*% visible min.			0.00
			(0.01)
AIC	1947.43	1949.57	1950.40
Num. obs.	1770	1770	1770

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. Coefficients are log-odd units.

Standard errors clustered by electoral district.

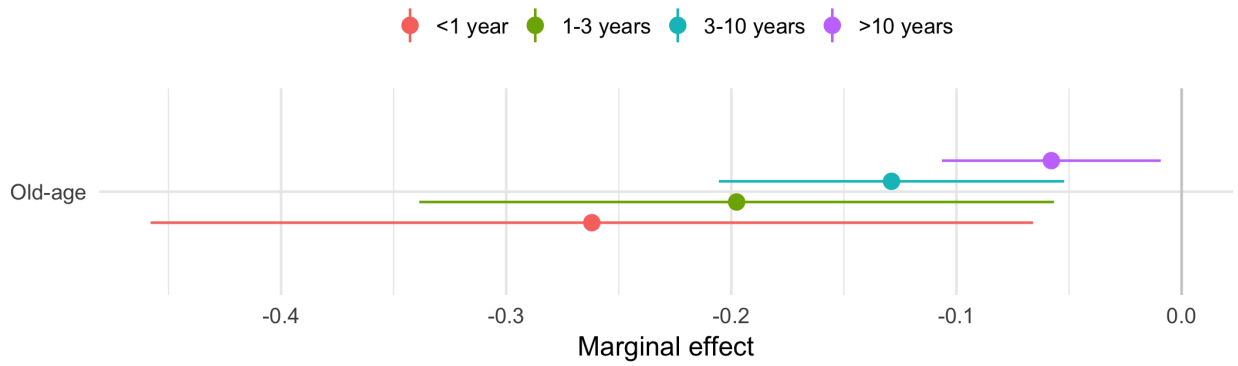
FIGURE 2 – Average marginal effects, model 3



with old-age. Model 2 includes these variables without the interaction terms. In order to visually render the relationships uncovered in Model 3, Figure 2 presents the average marginal effects of each variable on our dependent variable. For instance, Figure 2 indicates that on average, members of the older age group are about seven percentage points less likely to support increases in education spending than Canadians aged less than 65 years old. Unfortunately, the hypothesis of place attachment does not seem to have solid foundations in our sample. As shown by Model 3, having lived longer in the same city or community actually makes respondents *less* likely to support increased spending in education. The coefficient for sedentariness is positive in Model 2, but in neither this model nor in Model 3 does it reach statistical significance, giving us little confidence that attitudes towards education spending are related to length of residence in the Canadian population. Respondents living in more ethnically diverse areas are, as hypothesized, less likely to want more spending in this sector, but the relationship between these two variables is very weak. That being said, sedentariness *does* moderate the negative attitudes found amongst older respondents. The positive interaction term between old-age and sedentariness indicates that the attitudes of older Canadians towards education spending are *less negative* among individuals who have been living in the same neighbourhood for a more extended period of time. The coefficient for this interaction does not however reach statistical significance. This is shown in Figure 3, which plots the marginal effect of old-age on support for education spending at different levels of sedentariness. Even though the marginal effect of old-age is more positive for individuals who have been living in the same municipality for a longer period of time, the confidence intervals around

these effects are still quite large. We cannot be confident that the attitudes of older individuals really vary with length of residence.

FIGURE 3 – Marginal effect of old-age for different categories of sedentariness



After testing for multicollinearity, there appears to be high collinearity between the variables "old-age" and "sedentariness" in Model 3, probably because an important number of older respondents have been living in the same city for more than ten years. Collinearity between these two variables is perhaps responsible for larger confidence intervals around the coefficients of these predictors, and the coefficient of the interaction term "old-age*sedentariness". The fact that the effect of old-age on the dependent variable remains statistically significant is therefore surprising. Increasing the number of observations or attempting a more precise measure of sedentariness (which has, currently, only four categories) could work to diminish the amount of uncertainty around these effects. In other words, I would argue that more empirical tests need to be performed before giving up on the hypothesis of sedentariness.

Discussion

In this paper, I explored the preferences of older Canadians towards government spending in education. Previous research on older people's attitudes towards public spending in programs that do not directly benefit them have reached mixed conclusions. Analyses presented in this paper have confirmed that Canadians aged 65 years and over—whose children are probably not in school anymore—are less likely to favour increased spending in education. To better understand these attitudes, I examined the hypothesis of place attachment, which predicts that individuals who are more attached to their place of living should be more likely to support investments in local services, like schools. On the one hand, I did not find any convincing evidence that more sedentary people (who have been living in the same community for a longer period of time) wanted more investments in the education sector. More sedentary people should be more in favour of this proposition because they are thought of as being more attached to their neighbourhood. However, I did find that *older individuals* who have been living in the same community for a longer period of time were more in favour of education spending than individuals of the same age group who hadn't aged in place. Unfortunately, this last finding could not be generalized to the entire Canadian population. On the other hand, I did not find any convincing evidence that Canadians

(old and young) living in more ethnically diverse places had different preferences about education spending, when compared to people living in less diverse places. Just like sedentariness, lower levels of ethnic diversity had previously been associated with higher levels of place attachment.

The potential exportability of the hypothesis of place attachment to the Canadian context therefore seems doubtful. The impact of a locality's level of ethnic diversity on people's attitudes towards welfare spending seems particularly difficult to apply to Canada. Quite simply, it is possible that variables at the local level, like the length of residence or the level of ethnic diversity in a municipality, are simply not relevant to preferences about policies that are not decided locally, like school spending. As was previously mentioned, being more attached to one's place of living might not affect Canadians' attitudes towards school funding because decisions in the education sector are more centralized in Canada than in other places where we find research on this question, like the United States (for e.g., Ladd & Murray 2001, Poterba 1997, Sorensen 2013, Grob & Wolter 2007).

Otherwise, it might be the case that past results on this question constitute an instance of ecological fallacy. In fact, previous studies looking at the relationship between age and school spending used aggregate-level data to examine the relationship between the proportion of older individuals in a district, the proportion of non-white school-aged population, and the level of education spending in a district (Poterba 1997, 1998). We need to acknowledge the possibility that the relationship uncovered by these authors isn't the result of individual preferences, but of something else. For example, districts composed of a higher proportion of older people and where a large proportion of the school-aged population isn't white might carry on a heritage of weaker government intervention in social programs. In these places, it is perhaps simply because the school system is organized differently—and not because citizens are less favourable to education spending—that monies attributed to schools by the government are less important. We could think of many other factors responsible for these aggregate findings.

Besides, it might be the case that racial clashes are simply more relevant to welfare spending preferences in the United States than they are north of the border. American scholars seem relatively convinced that racist attitudes against blacks are associated to negative attitudes towards welfare programs aimed at helping low income citizens in their country (see, for e.g., Gilens 1995, Johnson 2001). The relationship is not so clear in Canada : "ethnic diversity in [a person's] region is not correlated with support for the welfare state" in employment insurance, health and pensions (Stichnoth & der Straeten 2013, 373). Soroka and his colleagues found "that 'the link [between regional ethnic diversity and support for social programs] is weak at best' ; 'moving from 100% majority to 50% majority leads to a decrease in aggregate support for unemployment and welfare of about .0025%' " (Stichnoth & der Straeten 2013, 373). Larger effects have actually been found when the recipient was Aboriginal, but not for other minorities (Harrell & Soroka 2010).

Despite some deceiving results concerning the hypothesis of place attachment, it is important to note that being older remains, throughout all of my models, a negative and significant predictor of support for increases in education spending in Canada. This finding indicates a quite robust relationship between old-age and attitudes on this issue. Considering that the survey question used to obtained this result does not contain any trade-off between government spending on education and government spending on other programs, it is surprising to see that older Canadians' responses were so overwhelmingly negative. We could actually expect that older Canadians would be even less in favour of increased spending on education if they were reminded that this came *at the*

expense of other publicly provided programs, like pensions or health care. Of course, government spending almost always comes at a cost. More spending in one field usually means that cuts need to be done in another area of expenditure. My measure of the attitudes of older Canadians towards education spending might have been more accurate—and the results might have been even stronger—had I used a question involving a trade-off between this program and others.

One of the most important limit of this study rests on the impossibility to disentangle age from generational and contextual effects. Throughout this paper, I have attributed differences in preferences towards education spending to *age* differences. But in 2015, people aged 65 years and over were part of either the baby boomer generation (born after the Second World War) or the previous generation (born prior to 1945). The data at hand makes it impossible for us to know if the negative attitudes concerning education spending are restricted to members of these two generations, or if they can be generalized to Canadians aged 65+ years more generally. In other words, it is quite possible that other generations of Canadians will have different opinions on this issue upon reaching 65 years old. It is also possible that people born around the middle of the 20th century were less favourable to government spending in the education sector *throughout their lives*, and not only in old-age. These age differences are maybe also the result of contextual effects—at other moments of Canadian history, older citizens might not have been so unfavourable to increases in education spending. A longitudinal study using data that includes respondents of different generations at different points in their lives would be necessary to verify if age really is responsible for these attitudes, or if the difference rather stems from generational or period effects.

Concluding remarks

This exploratory analysis of older Canadians' policy preferences has perhaps raised more questions than it has been able to answer. One of the questions relates to how differences in preferences translate into differences in democratic representation. In terms of substantive representation, if older citizens have notably different policy preferences than the rest of the population *and* become relatively more numerous than their younger counterparts, we could expect their priorities to be implemented more by our elected officials. If, in addition, this phenomenon is accompanied by inequalities in electoral participation—which is currently the case in Canada, where older citizens exercise their right to vote more than younger people (Blais, Gidengil, Nevitte & Nadeau 2004)—we might eventually witness growing inequalities in the substantive representation of different age groups in Canada. Different minority groups, like women (Trimble 2006), less affluent citizens (Gilens 2012) and racialised minorities (Bird 2011) have previously been looked into by scholars interested in knowing whether differences in terms of political participation and access to power have an impact on which policies get implemented. However, inequalities in representation due to age differences haven't been studied to the same extent. The ongoing process of population ageing might perhaps attract the attention of political scientists to this issue. It is noteworthy to mention that a few of the mechanisms sometimes raised to explain why poorer citizens, women and members of minority groups do not see their favourite policies being implemented to the same extent as those of the rest of the population also seem to be at play in the case of age groups. For instance, as already mentioned, current cohorts of young Canadians do not participate in electoral politics as much as their parents and grandparents. Besides, younger generations of Canadians

are less involved in political parties (Cross & Young 2004), and exhibit lower levels of political interest (Martin 2012). All of these factors have been associated (directly or indirectly) to less accurate descriptive and substantive representation (in the American case, see Gilens 2012).

Whether Canada is on the verge of "grey power" is still unclear. The present study has only demonstrated that older Canadians do not support increases in education spending to the same extent as their fellow citizens. My broader research agenda will attempt to provide a more comprehensive answer to this question, and to measure the attitudes of older citizens on many more topics and with much more precision. For now, I will simply conclude by reiterating that older Canadians are not a monolithic group. Many express feelings of solidarity that push them to support programs that will never come to their benefit, and would be willing to make sacrifices to their current standard of living so that future generations can have a better quality of life. This should not be disregarded by any study that aims at making predictions about which policies could be adopted when older citizens will make up of a majority of the Canadian population.

Word count (including notes and appendices) : 6416

Appendices

Indicators

Support for education spending (dependent variable)
Should the federal government spend more, less, or about the same as now on education ? (1 = spend more ; 0 = spend less or about the same as now)

Old-age
In what year were you born ? (1 = 65 years old and more in 2015 ; 0 = less than 65 years old in 2015)

Sedentariness
For how many years have you lived in your current city or community ? (1 = less than 1 year ; 2 = 1 to 3 year(s) ; 3 = 3 to 10 years ; 4 = more than 10 years)

Income
Combination of responses on (either) declared income and income category. (1 = less than $ 29,999 ; 2 = $ 30,000-$ 59,999 ; 3 = $ 60,000-$ 89,999 ; 4 = $ 90,000-$ 109,999 ; 5 = More than $ 110,000)

Education
What is the highest level of education that you have completed ? (1 = elementary school or less ; 2 = some secondary or high school ; 3 = completed secondary or high school ; 4 = technical, community college, cegep, college classique (completed or not) ; 5 = undergraduate education (completed or not) ; 6 = Master's degree, Ph.D. or professional degree)

Gender
Are you... ? (0 = male ; 1 = female)

Vote intention
Which party do you think you will vote for ? / Is there a party you are leaning towards ? / If you decide to vote, which party do you think you will vote for ? (1 = Liberal Party ; 2 = Conservative Party ; 3 = NDP ; 4 = Bloc Québécois ; 5 = Green Party)

Home-ownership
Do you or someone in your household own your home ? / If you decide to vote, which party do you think you will vote for ? (1 = Yes ; 0 = No/Rent)

Attitudes towards government spending
Should the federal government spend more, less, or about the same as now on health care / welfare / environment / crime and justice / defence / immigration and minorities ? (0 = spend less ; 1 = spend about the same as now ; 2 = spend more)

Supplementary analyses

TABLE 4 – The effect of age (continuous) on support for education spending

	Model 1	Model 2	Model 3
Intercept	0.57	0.30	0.58
	(0.42)	(0.51)	(1.31)
Age	−0.02***	−0.02***	−0.02
	(0.00)	(0.00)	(0.02)
Income	−0.03	−0.03	−0.03
	(0.05)	(0.05)	(0.05)
Education	0.03	0.04	0.04
	(0.05)	(0.05)	(0.05)
Women	0.26*	0.25*	0.26*
	(0.11)	(0.11)	(0.11)
PCC	−0.88***	−0.88***	−0.89***
	(0.13)	(0.13)	(0.13)
NDP	0.38*	0.36*	0.36*
	(0.16)	(0.16)	(0.16)
BQ	1.11*	1.07*	1.05*
	(0.41)	(0.41)	(0.41)
Green	−0.19	−0.21	−0.20
	(0.27)	(0.27)	(0.27)
Attitudes towards spending	0.25***	0.25***	0.25***
	(0.03)	(0.03)	(0.03)
Home owner	−0.46*	−0.48*	−0.50*
	(0.24)	(0.24)	(0.24)
Sedentariness		0.09	0.11
		(0.10)	(0.33)
% visible min.		−0.00	−0.02
		(0.00)	(0.01)
Age*sedentariness			−0.00
			(0.01)
Age*% visible min.			0.00
			(0.00)
AIC	1934.21	1936.18	1937.89
Num. obs.	1770	1770	1770

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. Coefficients are log-odd units.

Standard errors clustered by electoral district.

TABLE 5 – The effect of age (60-y.o. threshold) on support for education spending

	Model 1	Model 2	Model 3
Intercept	−0.19	−0.35	0.06
	(0.37)	(0.49)	(0.59)
Age	−0.59***	−0.59***	−1.58*
	(0.13)	(0.13)	(0.72)
Income	−0.04	−0.04	−0.04
	(0.05)	(0.05)	(0.05)
Education	0.03	0.05	0.04
	(0.05)	(0.05)	(0.05)
Women	0.25*	0.24*	0.25*
	(0.11)	(0.11)	(0.11)
PCC	−0.91***	−0.91***	−0.91***
	(0.13)	(0.13)	(0.13)
NDP	0.37*	0.36*	0.37*
	(0.16)	(0.16)	(0.16)
BQ	1.10*	1.06*	1.06*
	(0.41)	(0.41)	(0.41)
Green	−0.18	−0.20	−0.18
	(0.27)	(0.27)	(0.27)
Attitudes towards spending	0.24***	0.24***	0.24***
	(0.03)	(0.03)	(0.04)
Home owner	−0.43	−0.45*	−0.45*
	(0.23)	(0.23)	(0.24)
Sedentariness		0.05	−0.04
		(0.10)	(0.13)
% visible min.		−0.00	−0.01
		(0.00)	(0.00)
Age*sedentariness			0.24
			(0.19)
Age*% visible min.			0.00
			(0.01)
AIC	1933.49	1935.87	1937.79
Num. obs.	1770	1770	1770

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. Coefficients are log-odd units.

Standard errors clustered by electoral district.

TABLE 6 – The effect of age (70-y.o. threshold) on support for education spending

	Model 1	Model 2	Model 3
Intercept	−0.37	−0.39	−0.34
	(0.38)	(0.49)	(0.51)
Age	−0.25	−0.25	−0.59
	(0.15)	(0.15)	(1.07)
Income	0.02	0.02	0.02
	(0.04)	(0.04)	(0.04)
Education	0.03	0.04	0.04
	(0.05)	(0.05)	(0.05)
Women	0.26*	0.26*	0.26*
	(0.11)	(0.11)	(0.11)
PCC	−0.92***	−0.92***	−0.92***
	(0.13)	(0.13)	(0.13)
NDP	0.39*	0.37*	0.37*
	(0.16)	(0.16)	(0.16)
BQ	1.18**	1.13*	1.12*
	(0.40)	(0.40)	(0.40)
Green	−0.19	−0.21	−0.21
	(0.27)	(0.27)	(0.27)
Attitudes towards spending	0.22***	0.22***	0.23***
	(0.03)	(0.03)	(0.03)
Home owner	−0.53*	−0.53*	−0.54*
	(0.23)	(0.23)	(0.23)
Sedentariness		0.01	0.00
		(0.10)	(0.11)
% visible min.		−0.00	−0.00
		(0.00)	(0.00)
Age*sedentariness			0.08
			(0.27)
Age*% visible min.			0.00
			(0.01)
AIC	1954.26	1956.30	1960.12
Num. obs.	1770	1770	1770

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. Coefficients are log-odd units.

Standard errors clustered by electoral district.

TABLE 7 – The effect of age on support for education spending, non-visible minority sample only

	Model 1	Model 2	Model 3
Intercept	−0.27	−0.43	−0.02
	(0.38)	(0.49)	(0.57)
Old-age	−0.40**	−0.40**	−1.75*
	(0.13)	(0.13)	(0.77)
Income	−0.01	−0.01	−0.01
	(0.05)	(0.05)	(0.05)
Education	0.04	0.05	0.05
	(0.05)	(0.05)	(0.05)
Women	0.25*	0.25*	0.25*
	(0.11)	(0.11)	(0.11)
PCC	−0.94***	−0.94***	−0.94***
	(0.13)	(0.13)	(0.13)
NDP	0.40*	0.38*	0.39*
	(0.17)	(0.17)	(0.17)
BQ	1.26*	1.22*	1.22*
	(0.44)	(0.44)	(0.43)
Green	−0.29	−0.30	−0.29
	(0.27)	(0.27)	(0.27)
Attitudes towards spending	0.22***	0.22***	0.22***
	(0.03)	(0.03)	(0.03)
Home owner	−0.47*	−0.48*	−0.48*
	(0.24)	(0.24)	(0.24)
Sedentariness		0.05	−0.07
		(0.10)	(0.12)
% visible min.		−0.00	−0.00
		(0.00)	(0.00)
Old-age*sedentariness			0.36
			(0.20)
Old-age*% visible min.			−0.00
			(0.01)
AIC	1847.44	1850.39	1851.81
Num. obs.	1686	1686	1686

***$p < 0.001$, **$p < 0.01$, *$p < 0.05$. Coefficients are log-odd units.

Standard errors clustered by electoral district.

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