

Introduction

Declining political participation among younger Canadians has excited considerable debate in this country. In the federal election of 2000, which saw voter turnout fall to 64%, 1 it is estimated that as few as one-quarter of eligible 18-25 year olds turned out to cast a ballot (Pammett and Leduc 2003, 20). Nor is electoral abstinence limited to the youngest Canadians or the most recent election. Patterns of voter turnout over time point to substantially reduced participation among both the 1960s and 1970s birth cohorts, a trend that began some years back but is only now starting to manifest itself in substantial reductions in aggregate turnout levels (Blais and Dobrzynska 2003). If younger cohorts continue to act as they have in the past, turnout is likely to drop further still in years to come, potentially placing a significant strain on the democratic legitimacy of the electoral process. Understanding the sources of this burgeoning problem represents an important priority for policymakers and an intriguing challenge for researchers.

One factor that appears to play a significant role is political knowledge. According to the author's recent research, a very sizable gap exists between young and old in their knowledge of basic factual matters relating to Canadian politics, suggesting diminished understanding and capacity to participate on the part of younger Canadians. That same research has further revealed that knowledge has a greater impact on electoral participation among the young than the old. Moreover, the longitudinal patterns for both phenomena – lower levels of knowledge and heightened effects on participation – are consistent with cohort rather than life-cycle effects; it is not age that matters so much as year of birth, suggesting knowledge is particularly relevant to the most important and worrying trend in voter participation, the sharp decline among younger birth cohorts (Howe 2003).

These findings, however, rest upon an imperfect set of knowledge items from the Canadian election study series, items that have been subject to considerable variation in form and content over time and which only date back to 1984. Comparative analysis can enhance our understanding of these trends and shore up confidence in previous findings. Two research strategies suggest themselves. Comparing Canada to another country that has experienced a drop in voter turnout among younger cohorts in order to see if the underlying trends with respect to political knowledge are replicated is one approach.² A second strategy is to consider a country where participation among the young has not declined markedly, to see if the knowledge-related causes seemingly at work in the Canadian case are absent; or if they are present, to determine the mitigating or countervailing factors that have attenuated their impact. The second strategy is the one adopted in this paper, which compares Canada to the Netherlands on the relevant points.

The Netherlands offers a valuable comparison. Voter participation has traditionally been high, normally above 80%, considerably higher than in Canada which

¹ The 64% figure for overall turnout is the corrected figure produced by Elections Canada after the 2000 election once the register of electors had been purged of duplicates (the original turnout figure was just over 61%). This updated figure is cited by Canada's Chief Electoral Officer, Jean-Pierre Kingsley, in remarks delivered at *Symposium on Electoral Participation in Canada*, Ottawa, March 21, 2003, available at http://www.elections.ca.

² Two possible comparisons would be the United States and the United Kingdom. However, political knowledge items have only appeared on the most recent British election studies, limiting the possibilities for longitudinal analysis in this case.

has typically seen turnout levels in the low to mid-70s. While turnout did fall in the Netherlands in the 1990s, to a low of 73% in 1994, sparking concerns about disengagement of the Dutch citizenry (van den Broek 1994), it bounced back in the elections of 2002 and 2003 to the 80% level. Moreover, differences in electoral participation between young and old are slight, indeed smaller than in any of the other countries (save Australia, where voting is mandatory) cited by Wattenberg in his recent analysis of declining participation among young voters around the world (Wattenberg 2003, 161). The absence of significant cohort differences means that the decreased turnout the Dutch experienced in the 1990s was entirely attributable to a period effect, that is to say a downward shift in participation affecting all birth cohorts (Blais and Dobrzynska 2003).

On the knowledge side of the equation, there are also interesting and relevant contrasts with Canada. Whereas Canada is one of the Anglo-American countries that Henry Milner has recently diagnosed as suffering from low levels of "civic literacy," the Netherlands is among those Northern European countries held to be more robust in this regard (Milner 2002). Like Sweden, Norway, Denmark and Germany, the Netherlands has tended to rank high in cross-national comparisons of levels of political knowledge. While the conclusions that can be drawn from such assessments are somewhat limited, given that they almost always focus on the knowledge domain common to all countries, international affairs, these same countries also stand out in areas Milner identifies as crucial underpinnings of civic literacy. These include high levels of newspaper readership, a strong role for public television (due to the high quality of its news programming), as well as superior performance on cross-national literacy tests of a general nature. While Milner does not explicitly claim that such countries are immune to deterioration in their civic literacy levels, the solidity of the underlying foundations, which include public subsidies for newspapers, a strong commitment to public television, and high quality educational systems at all levels, suggests that they should be relatively secure. If the Dutch case reveals this to indeed be the case, it would reinforce the conclusion that eroding political knowledge and the attendant effects on voter participation are salient and distinguishing characteristics of Canadian politics. If, on the other hand, knowledge is also deteriorating in the Netherlands, further investigation is required to understand why the two countries exhibit this common pattern and why voter participation has been negatively affected in the one case and not the other. Finally, the Dutch case is also a sensible choice for practical reasons: for some time, the Dutch election studies have included what is probably the most consistent and comprehensive set of knowledge-based items of any national election study series, allowing for fruitful longitudinal comparisons with Canada.

In the remainder of this paper, two distinct issues are addressed, with two questions to be answered about each. The issues are: 1) levels of political knowledge across age groups and 2) the relationship between knowledge and electoral participation. The questions are: 1) how do Canada and the Netherlands compare? and 2) what factors explain any differences or similarities? Four sections follow that take up these matters one by one, beginning with the descriptive elements and then turning to the analytical dimension. The overall conclusion is somewhat surprising. Despite differences with respect to voter participation, Canada and the Netherlands show some important similarities in trends and patterns relating to political knowledge. Further analysis reveals

more about the circumstances under which knowledge influences participation and helps situate the Canadian case in a more general theoretical context.

Political Knowledge in Canada and the Netherlands

Assessing trends in political knowledge represents a significant challenge because of measurement inconsistencies over time. Unlike other survey items, which are often replicated without modification from one point in time to the next, political knowledge questions are normally updated to reflect changes in the political landscape. This is particularly true of the most common type of knowledge items that measure what Jennings (1996) has dubbed "surveillance" knowledge. These types of questions ask respondents for basic factual information about politics in their country, focussing on current political leaders and officeholders, as well as salient political issues of the day. The difficulty, of course, is that this approach undermines any attempt to gauge change or stability in levels of political knowledge over time, since incumbents and issues at time 1 may be more or less prominent, more or less readily recognizable, than those at time 2. In the absence of consistent measures, it is impossible to determine whether levels of knowledge are truly changing or simply fluctuating due to what is effectively a different measuring instrument at each point in time.

It is, however, possible to gain some analytical traction by examining *relative* levels of political knowledge in different sections of the populations at various points. This is the method used here, with the focus on differences across age groups. For the Canadian case, data from four election studies are used: 1984, 1993, 1997 and 2000. These are the only four Canadian studies on which a reasonable selection of knowledge-based items appear. The items vary in precise content, with some of the studies focussing more heavily on political leaders and personalities, others concentrating more on political issues (specifically party campaign promises). In the Dutch case, the question format and method has become quite consistent from one election study to the next, but the specifics still vary from election to election. Since 1981, respondents, in face-to-face interviews, have been shown photographs of prominent politicians and asked to provide their name, their party and their political position. For the 1971 Dutch election study, also used in the analysis below, respondents were simply asked to name as many cabinet ministers and members of parliament as they could. (Further details on the questions for both countries can be found in Appendix 1).

Using these varied questions, knowledge scores have been calculated for each election year based on the number of questions respondents answered correctly. To standardize across election years, these scores have been converted to percentile scores, thus imposing a consistent ranking method despite the variations in question format and content. The mean percentile scores within age groups are then calculated to assess the relative knowledge levels of different age groups over time. These results are assembled in Table 1.

The first point to note is that the mean percentile score for the sample as a whole (the final column in Table 1) is precisely 50 for each and every data point. This reflects the standardization method, which assigns each tied respondent the mean percentile score over the appropriate range (e.g. if 20% of the sample tied for top ranking, all would receive a percentile score of 90) and thereby ensures this result. The next point to note is

the division marked between age groups with sub-par levels of political knowledge, to the left of the dark border lines, and those with above-average levels of knowledge, to the right. This line helps to identify general trends over time, which, it turns out, are very similar in the two countries. In Canada, the two youngest age groups, those 18 to 23 and 24 to 29, had relatively low levels of knowledge in 1984. In the two elections of the 1990s, this knowledge deficit seeped upwards into the 30 to 34, and 35 to 39, age groups, a pattern that continued in the 2000 election. Meanwhile, in those latter elections, political knowledge among the youngest respondents dropped quite significantly, so that by the 2000 election, the mean percentile score among 18 to 23 year olds was only 31.4 – nearly 30 points lower than the most knowledgeable age group in that year, the 50 to 59 group. Both elements – the upward seepage and the increasing gaps between young and old over time - are consistent with cohort effects, where younger cohorts are entering political life with lower levels of knowledge than those who preceded them and failing to make up the difference as time goes on.

The Dutch results look much the same. In 1971, the only younger age group with sub-par levels of political knowledge was the 18 to 23 group and it was not lagging by much with a mean percentile score of 46.3. In 1981, however, this youngest age group was further behind (40.3), while 24 to 29 year olds also started showing signs of diminished levels of political knowledge. In subsequent years, both trends continue – the political knowledge deficit progresses into adjacent older age groups and knowledge levels decline further still among the youngest groups. As in the Canadian data, the Dutch results reveal a very sizeable gap between young and old by the end of the series, in this case a 25 point gap in the 1998 data separating the youngest group and the more knowledgeable 50 to 59 group.

Table 1: Political Knowledge (Percentile Scores) by Age Group Over Time

					Age Gro	oup	Age Group									
	Year	18-23	24-29	30-34	35-39	40-49	50-59	60 plus	Total	N						
Canada	1984	39.3	43.7	51.9	51.4	54.4	57.9	52.4	50.0	3319						
	1993	36.7	46.7	47.1	50.3	55.5	53.1	56.0	50.0	3188						
	1997	37.8	41.0	46.1	47.7	53.2	58.4	57.0	50.0	3883						
	2000	31.4	36.2	47.6	49.5	51.4	59.7	58.3	50.0	3588						
Netherlands	1971	46.3	53.7	52.2	49.3	51.5	53.1	43.9	50.0	2493						
	1981	40.3	46.5	52.4	53.4	55.0	54.2	49.0	50.0	1812						
	1986	35.0	45.6	54.9	53.6	56.0	58.0	48.8	50.0	1356						
	1989	36.2	44.1	51.4	55.6	56.3	58.3	51.3	50.0	1506						
	1994	34.4	43.5	45.6	49.8	57.3	55.6	52.8	50.0	1527						
	1998	34.1	41.4	41.9	47.8	53.9	59.3	56.6	50.0	2100						

This presentation of the data helps illuminate broad patterns, but must be handled carefully. In particular, it would not do to put too fine a point on the magnitude of the differences in political knowledge between the two countries or across time points based

on the percentile ranking approach. For this method artificially imposes a common range of variation (0 to 100) on every time point regardless of the true extent of variation. Conceivably, for one or more of the time points in Table 1 there could be very little variation in levels of knowledge in the sample, but the percentile method would still assign those with the lowest *relative* levels of knowledge a percentile score of 0 or thereabouts, making them appear as politically unaware as the truly politically ignorant in a more widely scattered distribution.

One way to address this concern is to consider raw scores and measures of dispersion; these numbers are provided in Appendix 2. The mean scores (which have been adjusted to a score out of 10 in all cases, regardless of the number of questions posed) fluctuate considerably, suggesting that the bundles of items for different years do vary in their level of difficulty. However, and more importantly, the standard deviations do not vary nearly as much. The smallest standard deviations are around 2.4 and the largest are about 3.3, figures that represent considerable variation at all points in time for a variable that only has a range from 0 to 10. This alternative method of data presentation could be taken further (e.g. through the calculation of mean z-scores across age groups). But the general conclusion is clear enough: the gaps between younger age groups and older ones, which Table 1 indicates have become larger over time in both countries, are of considerable absolute magnitude taking into account raw scores and measures of dispersion.

For further inter-country comparisons, some additional reformulation of the data is desirable to produce measures of political knowledge that can be more readily juxtaposed and contrasted. To that end, a common knowledge scale was created by selecting a subset of the knowledge-based items from the most recent election study in each country. The objective was to choose items of similar difficulty in order produce a knowledge scale for the two countries with roughly the same mean and degree of dispersion. Through this method the following items were selected: from the Canadian election study of 2000, the name of the leaders of three of the opposition parties (the Alliance, Stockwell Day; the Conservatives, Joe Clark; and the NDP, Alexa McDonough) and the name of the federal finance minister (Paul Martin), questions answered correctly by 71%, 65%, 45% and 63% of respondents, respectively; and from the Dutch election study of 1998, the political position held by Annemarie Jorritsma (minister of transport and communications), the identification of Jorritsma from her photograph, the identification of Jacques Wallage (leader of PvdA) and his political party, answered correctly by 75%, 65%, 41% and 53% of respondents, respectively.

Scoring each correct answer as one produces a simple four-item scale with a range from 0 to 4. Table 2 displays mean scores on this scale by age group for the two countries. The overall means for Canada and the Netherlands are very close as anticipated (2.45 and 2.35 respectively) as are the standard deviations (1.53 and 1.41 respectively). The age pattern is similar too, consistent with that seen in Table 1: younger age groups in both places are less knowledgeable, and by a fair margin at that, than the most knowledgeable group, those 50 to 59. In Canada, those in the youngest group are able to answer, on average only 1.5 questions out of 4 correctly, compared to 3 out of 4 for the 50 to 59 group. In the Netherlands, the corresponding figures are 1.9 and 2.8, a smaller but still considerable difference.

Table 2: Mean Knowledge Scores On Four-Item Scale by Age

Age Group	Canad	da, 2000	Netherlands, 1998			
	Mean	SD	Mean	SD		
18-29	1.52	1.51	1.87	1.34		
30-39	2.35	1.54	2.14	1.45		
40-49	2.53	1.5	2.49	1.38		
50-59	3.01	1.31	2.79	1.3		
60 plus	2.93	1.27	2.57	1.37		
Total	2.45	1.53	2.35	1.41		

Table 3 takes into account the effects of education levels, another important determinant of political knowledge, on these estimates of age differences. In both countries, education levels tend to be higher in younger age groups and political knowledge increases with education level; thus controlling for education increases the estimated gap in political knowledge between younger groups and the comparison group, those 50 to 59. In addition, since education levels vary more across age groups in the Netherlands than in Canada, the inclusion of education causes the age coefficients for the Netherlands to move closer to the corresponding coefficients in the Canadian case. Most are roughly equal; the exception is the youngest group, where the Canadian coefficient (-1.54) remains rather larger than the Dutch (-1.07).

Table 3: Knowledge Scores on Four-Item Scale, OLS Regression

	Canada, 2000				Netherlands, 1998					
	В	(SE)	В	(SE)	В	(SE)	В	(SE)		
18-29	-1.472	(0.077)	-1.535	(0.071)	-0.924	(0.100)	-1.071	(0.094)		
30-39	-0.639	(0.078)	-0.763	(0.073)	-0.657	(0.098)	-0.802	(0.093)		
40-49	-0.466	(0.076)	-0.527	(0.071)	-0.305	(0.099)	-0.412	(0.094)		
60 plus	-0.058	(0.077)	0.187	(0.072)	-0.219	(0.100)	-0.002	(0.095)		
Education			0.272	(0.011)			0.176	(0.011)		
Constant	2.992	(0.057)	1.261	(0.087)	2.792	(0.074)	1.953	(0.087)		

Notes: Entries are unstandardized regression coefficients.

For age categories, the comparison group is the 50-59 group.

It should be underscored that this method of reformulating the data is not presumed to allow for absolute comparisons of levels of political knowledge between the two countries, for the questions included in these four-items scales have been deliberately selected in order to produce roughly equivalent means and variances. It does, however, allow for similarly structured intra-country analyses that can then be juxtaposed to look for broad similarities and differences in both the determinants and the effects of variations in political knowledge in the two countries. The first comparison using this four-item scale confirms what was seen above with a more indiscriminate inclusion of knowledge items spanning a larger time frame: that younger people know considerably less about politics than their elders in both Canada and the Netherlands.

[&]quot;Education" represents highest level of education completed, with 11 categories for Canada and 10 for the Netherlands

Knowledge and Electoral Participation in Canada and the Netherlands

If there is a surprising convergence between Canada and the Netherlands in the emergence of a considerable knowledge gap between young and old, the same is not true of the relationship between knowledge and electoral participation. Table 4 captures the basic difference. In Canada, the propensity to vote tails off sharply amongst those with lower levels of political knowledge. Drawing on the simple four-item scale from above, 70% of respondents answering one item correctly and 54% of those answering no items correctly reported voting in the 2000 federal election. The latter figure is nearly 40 points lower than reported turnout among the most politically knowledgeable Canadians, those who answered all four items correctly. On the Dutch side of things, the decline in participation across knowledge levels is considerably less steep, with small, steady decrements producing only a 16 point gap between the most and least knowledgeable respondents.

Table 4: Voting by Political Knowledge (Four-Item Scale)

Number of Correct Answers	Canada	(N)	Netherlands	N
0	0.54	(426)	0.81	(249)
1	0.70	(343)	0.85	(238)
2	0.84	(356)	0.87	(418)
3	0.89	(575)	0.96	(331)
4	0.93	(1188)	0.97	(549)
All	0.83	(2888)	0.91	(1786)

Entries are the proportion who reported voting in the 2000 Canadian federal election and the 1998 Dutch parliamentary election.

In the Canadian case, the simple relationship between knowledge and voting can be unpacked through further elaboration. This elaboration is contained in Table 5, which arrays the data from Table 4 by age group. Table 5 reveals a clear and important pattern: differences in electoral participation across knowledge levels are much greater among the young than the old. Among those in the 18 to 29 age group, the gap in participation between most and least knowledgeable is over 50 percentage points; among those 50 and older, it is only about 15 percentage points. No such pattern is evident in the Dutch data in Table 5. Young or old, the gap in voting turnout looks much the same: roughly a 15 to 20 point decline in electoral participation in moving from the high to low end of the five-point knowledge scale.

Table 5: Voting by Political Knowledge (Four-Item Scale) and Age Group

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			Age Grou	ps	
Canada					
Number of Correct Answers	18-29	30-39	40-49	50-59	60 plus
0	0.35	0.63	0.64	0.80	0.80
1	0.60	0.63	0.83	0.85	0.88
2	0.77	0.77	0.85	0.93	0.92
3	0.78	0.80	0.91	0.94	0.95
4	0.87	0.88	0.94	0.96	0.95
Netherlands					
Number of Correct Answers	18-29	30-39	40-49	50-59	60 plus
0	0.83	0.76	0.78	0.72	0.92
1	0.84	0.92	0.79	0.84	0.84
2	0.82	0.86	0.88	0.85	0.93
3	1.00	0.93	1.00	0.95	0.94
4	0.96	0.96	0.99	0.97	0.98

Entries are the proportion who reported voting in the 2000 Canadian federal election and the 1998 Dutch parliamentary election.

Together Tables 1 though 5 capture some critical similarities and differences between the two countries. A considerable knowledge gap has opened up between young and old in the Netherlands. This, however, has not proven to be particularly damaging to turnout levels, since knowledge has only a modest impact on voting, an impact which is no greater among the young than the old. Canada has witnessed the emergence of a slightly larger knowledge gap between young and old, but also and perhaps more critically, an intensification of the impact of knowledge on participation among younger cohorts. The following sections seek to uncover some of the underlying reasons for these varying patterns.

Explaining the Similar Outcome: The Age Gap in Political Knowledge

Having identified some important similarities and differences between Canada and the Netherlands in the realm of political knowledge, it remains to account for these patterns. In considering the common gap in knowledge levels between young and old in the two places, patterns of media use are one critical area to consider. Much recent work has explored the relationship between political knowledge and media consumption habits. Some of this work emerges from investigations of the determinants of political knowledge (Milner 2002, 90-104); some of it comes from research that assesses the charge of "media malaise," the claim that changes in media practices have contributed to democratic disaffection and disengagement in various ways, diminished political knowledge among them (Newton, 1999; Norris 2000). While the degree to which the media are truly to "blame" remains a lively area of dispute, there is some agreement on basic patterns: media consumption patterns are related to levels of political knowledge; readings newspapers, particularly higher quality newspapers, is positively associated with

political knowledge; and the relationship to electronic media consumption is more mixed, with general TV viewing having a mildly negative correlation with knowledge, but consumption of news programming, especially public sector news programming, showing a positive relationship (Newton, 1999; Norris 2000, 208-32; Milner 2002 90-104).

It has also been observed in various research contexts that media consumption patterns differ for young and old. Wattenberg notes that young Americans do not follow politics in newspapers nearly as much as their elders and furthermore that in their TV viewing habits they are less likely to partake of news and current events programming (Wattenberg 2003, 165-6), echoing findings from earlier studies (Bennett, 1998) and from other countries (Peiser 2000).

On the basis of these prior findings and observations, regression models have been constructed for each of Canada and the Netherlands designed to assess how much of the age gap in political knowledge can be accounted for by media consumption habits. Table 5 presents the results in two parts, Part A for the Canada and Part B for the Netherlands. The dependent variable is the four-item knowledge scale from above. The age variable in both cases is identical: a five-category variable, entered as a simple continuous variable, and coded so that younger respondents take on larger values (the latter facilitates interpretation of results from interaction variables, described below). The education variable, highest level of education completed, is also recoded so that lower levels of education have higher values for consistency's sake; consequently negative coefficients are anticipated.

The media consumption variables, also coded so that higher values indicate lower levels of consumption, do differ somewhat between the two countries due to the absence of identical measures. For Canada, media consumption of politics is measured by variables asking respondents how much attention they had paid to the federal election campaign in newspapers over the past few days and how much attention they had paid to the campaign on television over the same period. For the Netherlands, attention to politics in newspapers is captured by a question asking how often the respondent reads about national news,³ while TV attention is measured by questions asking about the frequency of viewing newscasts on each of three Dutch TV channels, compiled into a simple additive index.

The results in Table 6 report standardized regression coefficients, starting in both cases with just the demographic variables in model 1. The media consumption variables are added in model 2. Included in model 3 are interaction effects – interactions between age and the two media consumption variables – as these turn out to be quite important. Since higher values for the age variable correspond to younger respondents, and higher values for the media variables to those with low media use, these interaction variables take on large values for young respondents who pay little attention to politics in newspapers and on TV.

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³ The 2000 Canadian study does ask respondents how many days per week they read the newspaper; however, it does not ask about levels of attention to political news. Therefore, the campaign attention variable is used instead.

Table 6: Influence of Media Use on Age Differences in Political Knowledge, OLS Regression

A) Canada

	Model 1	Model 2	Model 3
Age	-0.396*	-0.328*	-0.060
Education	-0.385*	-0.322*	-0.318*
Newspapers		-0.147*	-0.035
TV News		-0.181*	0.030
Newspapers*Age			-0.170*
TV News * Age			-0.312*
R^2	0.249	0.32	0.337

Entries are standardized regression coefficients

*p<.01

Variable Definitions:

Age: five category age variable from above

Education: highest level of education completed (11 categories)

Newspapers: attention paid to federal election campaign in newspapers over past few days (11 point scale).

TV News: attention paid to federal election campaign on TV over past few days (11 point scale).

B) Netherlands

	Model 1	Model 2	Model 3
Age	-0.294*	-0.172*	0.087
Education	-0.345*	-0.274*	-0.272*
Newspapers		-0.243*	-0.187*
TV News		-0.123*	-0.002
Newspapers*Age			-0.094
TV News * Age			-0.271*
\mathbb{R}^2	0.15	0.224	0.228

Entries are standardized regression coefficients

Variable Definitions:

Age: five category age variable from above

Education: highest level of education completed (10 categories)

Newspapers: how often R reads about national news (five point scale)

TV News: how often R watches newscast on three Dutch TV channels (10 point scale).

The critical focal point is the change in the age coefficient as the media variables are brought into the analysis. Adding the main effects for media consumption in model 2 has a fair impact on this coefficient in both countries, reducing it from -.396 to -.328 in the Canadian case and from -.294 to -.172 in the Dutch case. The interaction effects in model 3 strengthen this impact considerably, as the coefficient in the Canadian case drops to -.060 and in the Dutch case actually becomes positive (.087). Driving these changes are the strong interaction effects between age and media consumption, which signal the heightened effects of media consumption on political knowledge among younger age groups. Of particular importance here are the TV interaction effects: attention to politics on television is an especially important determinant of political knowledge among young

^{*}p<.01

people in these countries (beta = -.312 for Canada, beta = -.271 for the Netherlands).⁴ When these media consumption factors are taken into account, age differences in political knowledge essentially disappear.

These results underline an important commonality: despite a deep dependence on the media for political information, young people in both countries are failing to avail themselves in sufficient numbers of the available resources to attain the political knowledge levels of older citizens. The consistency of this result is noteworthy, for the Netherlands is a country that could reasonably be characterized as having a more information-rich media environment than Canada. As Milner's data show, it has higher levels of newspaper circulation than Canada and other low civic literacy societies (Milner 2002, 99). It also, like other European countries, has only recently seen the widespread adoption of cable television, which Wattenberg argues is a critical development because it increases the number of channels available and thereby promotes narrowcasting – television that caters to specialized interests that generally have nothing to do with politics (2003, 164-5). In the Netherlands, television airwayes were monopolized by public television until the late 1980s; by the late 1990s, cable penetration did reach nearly 100%, but public television remained an integral part of the broadcasting system, with three public service channels (Aarts and Semetko, 2003, 761). In Canada, by contrast, the sole public television broadcaster has long faced intense competition from a wide range of private broadcasters, both Canadian and American, fuelled by cable penetration that was already at roughly one-quarter of households by the early 1970s and had reached about 60% by the early 1980s. Despite these differences in the media environment and the timing of cable penetration, both countries experienced a downward trend in political knowledge that dates back to at least the early 1980s and which appears to be have been produced in good measure by the media consumption choices and habits of younger people. This suggests some important limits on the degree to which the media environment can curb the tendency of younger generations to eschew politicallyinformative media in favour of other diversions.

Explaining an Important Difference: The Effect of Knowledge on Voting

It was shown above that the relationship between political knowledge and electoral participation is markedly stronger in Canada than the Netherlands, particularly among the youngest citizens. It is this that really sets the Canadian case apart from the Dutch: the decline in knowledge levels, common to both countries, only becomes a major factor behind declining turnout when magnified by the interactive effect of age and knowledge on participation.

In seeking to explain the Canadian result in a previous paper, the hypothesis was advanced that the escalating impact of knowledge on voting among the young can be partly explained by a concomitant decline in the sense of civic duty. The reasoning was that a perceived duty to vote could offset the inhibiting effect on participation of a lack of

⁴ Most earlier studies have found that following politics on television is, at best, a weak predictor of political knowledge, certainly weaker than the effect of newspaper reading. See, for example, Hollander (1997), Lambert, Curtis, Kay and Brown (1988) and Robinson and Levy (1986). The interaction with age in the current analysis is suggestive of an emergent shift, in Canada and the Netherlands at least, in the relative importance of different news sources to political knowledge.

political knowledge. Someone lacking the rudimentary familiarity with political affairs needed to make a meaningful electoral decision might still opt to vote simply because they believe that every citizen has an obligation to do so (Howe 2003, 24). Indeed, studies of voting behaviour have suggested that a perceived duty to vote is, in fact, the most important determinant of electoral participation (Blais 2000, 92-114). However, this sense of duty has been declining among younger generations, in tandem with a broader shift in the political culture of affluent democracies away from fealty and deference towards individual expression and autonomy (Nevitte, 1996). As duty declines, knowledge comes to the fore: young people who know little about politics, and who remain unmoved by appeals to vote out of a sense of civic duty, simply stay at home.

One possible explanation for the Canadian-Dutch contrast, then, is that levels of duty have remained robust in the Netherlands, thereby cushioning the effects on participation of declining political knowledge among younger cohorts. Questions tapping into perceptions of the duty to vote appear on both the 1998 Dutch election study and 2000 Canadian study. They are differently worded but sufficiently similar to allow for a general comparison.

Table 7 shows the relevant results. There is no support for the proposition that duty to vote explains the difference. Younger Dutch cohorts are considerably more likely than their older co-nationals to express either outright opposition or, at best, lukewarm support for the proposition that "voting is a duty to society." Thirty-six percent of the 18 to 29 group disagree with this notion compared to only 13% of those 60 and older. In the Canadian case, the pattern manifests itself more in the reduced number in the younger group who strongly agree that "it is the duty of every citizen to vote."

Table 7: Perceived Duty to Vote by Age Group, Canada and Netherlands (%)

		, 8 -	17			
			Age Group	1		
Canada	18-29	30-39	40-49	50-59	60 plus	Total
Strongly agree	52.2	56.8	62.6	71.9	65.9	62.5
Agree	37.7	34.2	32.6	24.1	30.8	31.6
Disagree	9.6	6.5	2.9	3.4	2.1	4.5
Strongly disagree	0.4	2.5	1.8	0.7	1.2	1.4
N	228	278	380	295	328	1509
Netherlands	18-29	30-39	40-49	50-59	60 plus	Total
fully agree	12.8	13.8	13.6	17.2	27.2	16.8
Agree	48.4	49.2	59.4	60.1	58.4	54.8
Disagree	35.6	33.1	23	19.5	12.5	25.2
fully disagree	3.3	3.9	3.9	3.3	1.9	3.3
N	430	465	434	338	416	2083

Other explanations must be sought. Another possible avenue lies in a knottier area of analysis: potential differences between the two countries in absolute levels of political knowledge and/or the distribution of knowledge. The reasoning here derives from the pattern evident in the Canadian data on the relationship between knowledge and participation displayed in Table 4 above. The decline in voting with lower levels of

knowledge is not linear. At the upper ends of the knowledge scale, the decline is quite small. Decrements of only 4 and 9 percentage points respectively separate the most knowledgeable respondents – those answering four items correctly – from those answering three and two questions correctly. Moreover, these top three knowledge categories represent the bulk of the population, nearly three-quarters of the survey sample. It is only in the bottom quarter of the sample – those answering no questions correctly (15% of the sample) or only one (12% of the sample) – that the drop-off in voting is truly pronounced. From this pattern the following proposition emerges: if it is the case either a) that the Dutch are, on average, markedly more knowledgeable about their politics than Canadians, or b) that Dutch voters are no more knowledgeable on average, but there are fewer of them at the bottom end of the knowledge scale, then it is possible that the Netherlands has escaped the negative effects of declining political knowledge simply because there are relatively few at the lowest levels of political knowledge where the effects on participation become rather more dramatic.

Investigating this line of thinking represents a challenge, however. There is nothing in the data sources used above that would allow for the requisite comparisons. The four-item scale constructed for comparative purposes was only superficially fungible, for it was the product of deliberate calibration. Items were selected for inclusion in the scale simply on the basis of the proportion of the sample who answered them correctly. The questions selected from the Dutch study could be markedly more difficult in an absolute sense than the Canadian items, but there is no reliable way to determine this from the contents of the items themselves.

What is ideally required to draw absolute comparisons are measures of political knowledge based on identical items administered in the two countries contemporaneously. The possibilities here are rather limited. Milner does point to one study, which tested knowledge of the United Nations in a series of countries, among them Canada and the Netherlands. There were only two questions to the assessment, but sure enough, Dutch respondents significantly outpaced their Canadian counterparts, as 50% on average answered the questions correctly compared to just over 20% of the Canadians (Milner 2002, 59).

Other data sources allow for more indirect assessment and comparison of absolute levels and the distribution of political knowledge in the two countries. In the Dutch case, one useful source is a 1996 Eurobarometer poll that asked a series of ten knowledge-based questions pertaining to EU institutions and personalities. Somewhat surprisingly for one of the original six members states of the EU, the Dutch were only middling in their overall levels of knowledge, answering 3.40 questions correctly on average compared to 3.42 for all respondents combined (Table 8). Meanwhile, however, there were markedly fewer Dutch respondents at the bottom of the heap, in the group that was unable to answer any questions correctly: just over 7% in the Netherlands compared to 13% for the sample as a whole.⁵ The contrast is instructive. Even in a case where the Dutch were only average in their overall levels of knowledge – and what precisely is to be made of that is hard to say other than to concur with Milner that this study does tap into a very specific domain of knowledge that may not be representative of the broader civic literacy situation in the country (2002, 57-8) – the numbers falling at the low end of

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⁵ The sample sizes on this study were large, thus the margins of error are small. The 95% confidence interval for the Dutch figure is 6.5%-8.1% and for the entire EU sample, 12.7%-13.3%.

the knowledge scale are relatively few. Sweden, one of Milner's civic literacy stalwarts, exhibits the same pattern but even more dramatically, with a mean score below the EU average but very few, only 3.9%, at the bottom end. Meanwhile, Italy exemplifies the opposite pattern: comparable to Sweden in its mean score of 3.19 but much more heavily represented in the bottom group (18.8%). These results are consistent with Milner's observation that the high civic literacy societies of Northern Europe are notable as much for their minimal numbers at the bottom end of the knowledge scale as their mean levels of political knowledge (a pattern that is replicated in studies looking at literacy of a more general nature as well).

Table 8: Knowledge about the European Union, Selected Countries, 1996

Country	Netherlands	Sweden	Italy	EU-15
Mean score out of 10	3.40	3.27	3.19	3.42
None correct (%)	7.3%	3.9%	18.8%	13.0%
(N)	(3597)	(3169)	(6221)	(65178)

Source: Eurobarometer 44.2

Another data source sheds comparative light on the Canadian situation. In 2002, the National Geographic Society released results of an international study of levels of "geographic literacy" among 18 to 24 year old. Many of the items were geo-political in nature – locating countries on a map and identifying those states implicated in important international political developments. Table 9 shows the Canadian results in comparative perspective. Unfortunately the Netherlands was not one of the countries studied, but other European states were. While the sample sizes are small in this case, the results are striking. Nearly half the young Canadians fell into the bottom two categories, compared to only 10% of Swedes and 15% of Italians – two countries which, in the previous table, were comparable to the Netherlands in their overall levels of knowledge about EU affairs. The inference might reasonably be drawn that the Netherlands would probably have fared about as well as its EU counterparts had it been included in the National Geographic study.

Table 9: Geo-Political Knowledge, 2002, Selected Countries

Country	Canada	Sweden	Italy
Mean score out of 56	27	40	38
0 to 18 correct	20%	4%	7%
19 to 26 correct	29%	6%	8%
(N)	(313)	(300)	(303)

Source: Adapted from National Geographic - Roper 2002

Global Geographic Literacy Survey

If some of the basic patterns seem clear enough, the broader conclusions are more murky. The critical limitation with these cross-national comparisons, aside from the dearth of direct Canada-Netherlands comparisons, is that all address only the domain of political knowledge pertaining to international affairs. Still, the results are suggestive of

the type of pattern suggested above: that means levels of political knowledge are likely higher, and the incidence of abject ignorance likely lower, in the Netherlands than in Canada. If we return to the Dutch election study data with these tentative notions in mind, an interesting pattern can be discerned in the 1998 study. This particular study contained a rich array of knowledge items. Only a limited number of these were used in the analysis above, in the interests of maintaining some rough comparability to the Canadian data. If, however, a knowledge scale is constructed with these additional items, it is possible to explore the broader spectrum of political knowledge in Dutch society. Such a scale, based on 16 knowledge items, 6 is used in Table 10, which reports participation in the 1998 Dutch election. The salient results are at the top of the table, at the lower extremities of political knowledge. While reported participation remains high even as scores on this 16item knowledge scale drop from 16 to 2, it drops sharply in the final two categories, to 57% among those answering one item correctly and 42% among the literal "know nothings." Sample sizes are a concern here, of course, as these two categories contain only 17 respondents and 21 respondents, respectively – the margins of error on these estimates are very considerable. But then again, these diminutive sample sizes are also the point: it is only among these 38 respondents, 2% of the survey sample, that electoral participation plummets in the way it does in Canada among the bottom 25% of the population.

Table 10: Voting by Political Knowledge (16 item scale), Netherlands 1998

Knowledge Score	Proportion Who Voted	N
0	0.42	21
1	0.57	17
2	0.82	55
3	0.77	116
4	0.86	155
5	0.84	156
6	0.88	149
7	0.90	134
8	0.94	127
9	0.94	110
10	1.00	102
11	0.94	90
12	0.96	97
13	0.95	108
14	0.97	85
15	0.99	129
16	0.99	155
All	0.91	1807
T	. 1 . 1	. •

Entries are the proportion who reported voting in the 1998 Dutch parliamentary election.

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⁶ The 16 items include the 12 items used for the calculations in Table 1 (the identity, party and position of four politicians) and four items asking respondents which of two parties had more seats in the Dutch Parliament.

If the analysis above is correct – that the Dutch are, in absolute terms, more knowledgeable about their politics than Canadians are about theirs, and furthermore, that relatively few are profoundly uninformed, then these results suggest that there is actually a consistent pattern across the two countries. Participation is markedly affected by knowledge in both places, but only once knowledge falls below a fairly low absolute threshold. In some countries, like Canada, the numbers below this threshold represent a sizable portion of the population; in other places, such as the Netherlands, they are only a very small fraction of the population.⁷

Discussion and Conclusion

The objective in writing this paper was to shed further light on the relationship between political knowledge and declining electoral participation in the Canada by looking at a country which, it was anticipated, would differ in most important respects. In some ways, however, the Canadian case reflects as much light as it absorbs, illuminating features of Dutch politics which have not attracted as much attention as might be warranted.

Most notably, there is a surprising parallel between the two countries in the emergence of a sizeable gap in political knowledge between young and old over the past twenty years. This gap in both cases is substantial. It began among the youngest strata of society but has now moved upwards to envelop those in their thirties, in a pattern suggestive of cohort effects that will continue to have important consequences in years to come.

The forces behind the knowledge gap are similar too. Patterns of media use in Canada and the Netherlands go a long way towards explaining why this knowledge deficit has emerged. Despite some of the features of Dutch society as a whole that should serve to sustain high levels of civic literacy – high newspaper circulation levels, a strong public television tradition, high levels of general literacy - younger cohorts, like their Canadian counterparts, pay markedly less attention to politics both in newspapers and on television, and this inattention in both cases exacts a heavy toll on levels of political knowledge.

At the same time, to this point the knowledge gap in the Netherlands has exercised less influence on electoral participation than is the case in Canada. The reasons have not been unequivocally established, but one plausible hypothesis, supported by evidence of a scattered nature, is that the two countries do differ in one critical respect: for all the common trends of the past twenty years or so, the Dutch remain on the whole more knowledgeable about politics than Canadians. Since the most potent effects of political knowledge on participation only appear once knowledge drops below a certain threshold, the Netherlands has largely avoided them.

Bringing the pieces together, however, points to significant challenges ahead for both countries. While observers of Dutch politics might take heart from the fact that the Netherlands has witnessed little decline in voting among younger cohorts, the underlying trends with respect to political knowledge that have contributed to such a development in

⁷ Supporting this proposition is a study which found that even the least informed Dutch citizens were able to accurately assess party positions on concrete issues, the sort of knowledge that is of direct relevance to casting an informed ballot (van der Brug, 1998).

Canada appear to be at work. If these trends continue apace, significant numbers among rising cohorts may come to occupy the lower rungs on the political knowledge scale where participation effects become more pronounced. Meanwhile, the fact that knowledge levels are declining even in the Netherlands, where the buttresses of civic literacy are strong, suggests that any Canadian efforts to address the knowledge deficit and its attendant effects will not meet with ready success. Further case studies may modify these conclusions, but the experiences of two rather different countries suggest that declining political knowledge among the young is a pervasive phenomenon that will stand as one of the more important governance challenges in the established democracies in years to come.

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Data from the 1971, 1981, 1986, 1989, 1994 and 1998 Dutch election studies were made available by the Inter-University Consortium for Political Research at the University of Michigan. Principal investigators for the studies are as follows: 1971, Robert J. Mokken and Frans M. Roschar; 1981, C. Van Der Eijk, B. Niemoller and A. Th. J. Eggen on behalf of the Dutch Inter-University Election Study Workgroup; 1986, C. van der Eijk, G.A. Irwin and B. Niemoller on behalf of the Dutch Interuniversity Election Study Workgroup; 1989, H. Anker and E.V. Oppenhuis; 1994, H. Anker and E.V. Oppenhuis; and 1998, Kees Aarts, Henk van der Kolk and Marlies Kamp. Grants for the studies have come from the Netherlands Organization for the Advancement of Pure Research, the Departments of Political Science at the University of Amsterdam and the University of Leiden, the Ministry of Education, the Ministry of the Interior, and the Social and Cultural Planning Office.

Data for Eurobarometer 44.2, "Mega-Survey: Policies and Practices in Building Europe and the European Union" January-March 1996 were also made available by the Inter-University Consortium for Political Research at the University of Michigan. Principal investigators were Karlheinz Reif and Eric Marlier.

In all cases, the original investigators, the study sponsors and the distributing agencies bear no responsibility for the analyses and interpretations presented here.

Appendix 1: Political Knowledge Items Used in Table 1

Canada

Year

1984 10 items:

Names of all ten provincial premiers

1993 7 items:

- Party positions/promises
 - o Support GST
 - o Oppose GST
 - o Do away with NAFTA
 - o Eliminate deficit in 3 years
 - o Eliminate deficit in 5 years
 - Increase spending on public works
- Kim Campbell's cabinet job before becoming PM

1997 5 items:

- Party positions/campaign promises
 - o Lower personal incomes taxes by 10%
 - o Cut unemployment in half by 2001
 - Against recognizing Quebec as distinct society
- Name of federal finance minister
- Name of premier of own province

2000 10 items:

- Party positions/campaign promises
 - o Single tax rate
 - o National prescription drug plan
 - o Law to fight criminal biker gangs
 - o Law to pay back debt in 25 years
- Name of premier of own province
- Names of four party leaders (all major parties but Bloc Québécois)
- Name of federal finance minister

Netherlands

Year 1971 22 potential items: Names of ministers in the present government (open-ended), up to 14 mentions Names of members of Dutch Parliament (open-ended), up to 8 mentions 1981 30 items: Name, party and position of ten politicians presented in photographs 1986 12 items: Name, party and position of four politicians presented in photographs 1989 12 items: Name, party and position of four politicians presented in photographs 1994 12 items: Name, party and position of four politicians presented in photographs 1998 12 items: Name, party and position of four politicians presented in photographs

Note: Interviewers in the Dutch election studies are instructed to provide respondents with the correct name of the politician in the event of a "don't know" response to the identification question, after which the questions about party and position are posed.

Appendix 2: Alternative Presentation of Results from Table 1

Political Knowledge, Mean Scores and Standard Deviations, by Age Group Over Time

					Age Grou	ıp				
	Year	18-23	24-29	30-34	35-39	40-49	50-59	60 plus	Total	Standard
				_						Deviation
Canada	1984	2.44	2.77	3.49	3.43	3.66	3.95	3.55	3.31	2.42
	1993	3.15	4.29	4.32	4.66	5.25	4.98	5.30	4.64	3.18
	1997	2.71	2.98	3.44	3.61	4.13	4.62	4.51	3.84	2.68
	2000	3.27	3.79	4.93	5.08	5.29	6.06	5.94	5.13	2.74
Netherlands	1971	3.28	3.91	3.81	3.52	3.70	3.85	3.12	3.60	2.41
	1981	5.11	5.60	6.10	6.20	6.32	6.24	5.79	5.90	2.37
	1986	4.35	5.55	6.63	6.51	6.73	7.05	5.95	6.08	3.27
	1989	4.01	4.85	5.60	6.04	6.05	6.29	5.57	5.44	2.87
	1994	3.73	4.72	5.02	5.42	6.24	6.09	5.85	5.48	3.16
	1998	2.52	3.37	3.46	4.09	4.81	5.44	5.16	4.37	3.32

Entries represent mean scores on all knowledge items listed in Appendix 1, converted to scores out of 10.

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