

Data Description & Code Book

Principal Investigator(s)

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Title

Public Opinion on the Environment in Canada

Data Collector/ Producer

Data collected from May 8, 2018 to July 3, 2018

Project Description

This study curated public attitudes towards the environment within Canada from 1980 to 2017. This study examined eight topic areas:

- Acid rain
- Climate Change
- Deforestation
- Eco-friendly
- Environmental protection
- Ozone depletion
- Water quality
- Wildlife Protection

Methods

This section outlines the approach used to gather survey questions for analysis and subsequent analysis. Data sets were gathered from ODESI and Forum Research. Dataverses and ICPSR were searched for datasets, but it did not contribute to the collected data. When searching for data on ODESI, all the collections were selected (Statistics Canada, Public Opinion Polls, CORA, ICPSR, Canadian Dataverses, and Other Data), and the time was set such that all survey results were included. When searching on Forum Research, and other databases, terms were used in the search tool. The following search terms were used when searching for data on the topics:

- The topic of climate change, the terms were: climate, greenhouse gas, global warming, ozone layer, emissions, and environment
- The topic acid rain, the terms were: acid rain
- The topic deforestation: the terms were: deforestation, loss of forest, and clear cutting
- The topic environmental protection, the term was: environmental protection
- The topic ozone depletion, the terms were: ozone layer and ozone depletion

- The topic water quality, the terms were: water quality, water pollution, drinking water, and fresh water
- The topic wildlife, the terms were: wildlife, and endangered species

Every survey was reviewed from the results that were generated, with the exception of the data that required private access. Every survey was reviewed thoroughly for questions related to the topic. All the questions that were relevant were recorded into a word document.

The file called “term tracker” contains a record of the results of these searches. Originally, individual files were kept for each topic (these were later merged into a single file). The purpose was to avoid duplicated questions, group like questions, and allow for duplication of work. The term tracker records the date searched, the number of results found, the question, the variables (answers), who was asked, and the firm that conducted the survey.

The data was then recorded into excel sheets. Most questions recorded the topline results only. These questions tracked the total sample data, with each survey firm’s data being stored in a separate excel file. Within the file, each question asked had a separate sheet. Each sheet contained the question asked, the term searched, the date(s) asked, the answers/variables, type of survey, and link to the survey. The data was recorded in raw numbers. For a few questions, crosstabs were recorded allowing comparisons to be made between different categories. These questions were selected based on the interest of the research team. When a crosstab was conducted a separate file was created for each survey question. Sheets were created for each independent variable: sex, age, region, and political party. Age categories were manually calculated into age groups, unless already collapsed. Region categories were manually calculated by adding provinces together.

- Age categories: 18-35, 36-50, 51-65, 66+
- Center Region: Ontario and Quebec
- West: British Columbia, Alberta, Saskatchewan, and Manitoba
- Atlantic: New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador

If the data was in percentage, the percentage was changed to an estimated whole number based on the percentage and total sample. The date was recorded as day-month-year. If no day was provided, 01 was assigned; if no month was provided, a month was assigned based on the survey quarter: First quarter was assigned 03, second quarter was assigned 06, third quarter was assigned 09, and fourth quarter was assigned 12. If no quarter was assigned then 01 was assigned.

Questions that were asked two or more years were analyzed using the Dyad Ratios Algorithm by James Stimson (<http://stimson.web.unc.edu/software/>)¹. The purpose was to gather data to run on the software Wcalc (<http://stimson.web.unc.edu/software/>). Each topic had a separate excel file and a file was created combining all of the other files to look at overall attitudes towards the environment. Each file contained the date asked (month-day-year), the total sample size minus the “don’t know” and “refuse”, percentage of the response in favour of the topic (this included the responses agree,

¹ See for example: Stimson, J. A. (1991). *Public opinion in America: Moods, cycles, and swings* (Vol. 12). Boulder, CO: Westview Press. Or Stimson, J. A. (2004). *Tides of consent: How opinion movements shape American politics*. Cambridge University Press.

somewhat agree, strongly agree, etc.), and a recoded variable name. The recoded variable name corresponded with survey firm and the question asked.

- Cgall- Canadian Gallup Poll
- Deciq- Decimal Quarterly
- Envir- Environics
- Nangr- National Angus Reid Poll

Index = (Percent Agree) / (Percent Agree + Percent Disagree) *100

The excel sheet was then saved as a text file. Wcalc was used to run a time series of the data. When creating the time series, annual was selected and smooth on raw data series. Wcalc produced an excel file with an average of the years, and a log file interpreting the results (see wcalc files for the results). This was repeated eight times, for each topic. WCalc can be downloaded directly from James Stimson's website (<http://stimson.web.unc.edu/software/>). Also included in this package is the code for the program R, which can also be used to run the Dyad Ratios Algorithm (see Extract.r.zip and ExtractDoc.pdf)².

A quality control check was completed after all the data was inputted. The individual duplicated the results by following the term tracker. The individual noted any missing data and incorrect results. A third individual then verified whether the results were incorrect.

Substantive, Temporal, and Geographic Coverage of the Data Collection

1980 to 2015, Canada

Data Source(s)

Forum Research and ODESI were the websites were used to gather data. The following pollsters were gathered from ODESI:

- Canadian Gallup Poll
- Decima Quarterly
- Environics
- National Angus Reid Poll
- Statistics Canada

Unit(s) of Analysis/ Observation

Survey Firm	Years surveys conducted
<ul style="list-style-type: none"> • Canadian Gallup 	1980, 1981, 1983, 1985, 1986, 1987, 1989, 1990, 1991, 1992, 1993, 1994, 1996, 2000
<ul style="list-style-type: none"> • Decima Quarterly 	1982, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993, 1994
<ul style="list-style-type: none"> • Environics 	1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990,

² Shared with permission of Dr. James Stimson.

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| | 1991, 1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000,
2001, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011,
2012, 2013, 2015 |
| • Forum Research | 2013, 2014, 2015, 2016 |
| • National Angus Reid Poll | 1991, 1994 |
| • Statistics Canada | 1981, 1987, 1991 |

Variables

Acid rain, climate change, deforestation, eco-friendly, environmental protection, ozone depletion, water quality, and wildlife protection.

Data Collection Instruments

The original collector of data was done by telephone interviews, in person interviews, mail-back, and interactive voice response telephone survey. National Angus Reid Poll and Environics were conducted by the telephone. Canadian Gallup Polls and Decima Quarterly conducted in person. Statistics Canada used a combination of interview and mail-back survey. Forum Research polls were conducted with interactive voice response telephone survey.

List of Abbreviations and Other Conventions

Cgall- Canadian Gallup Poll
 DeciQ- Decimal Quarterly
 Envir- Environics
 Nangr- National Angus Reid Poll
 Statc- Statistics Canada

Coding Book

Attached