

**Comparative Study of Electoral Systems (CSES)  
Module 4: Design Report (Sample Design and Data Collection Report)**

September 10, 2012

Country:	Canada
Date of Election:	October 19 2015
Prepared by:	Patrick Fournier
Date of Preparation:	October 25 2017

**NOTES TO COLLABORATORS:**

- Where brackets [ ] appear, answer by placing an “X” within the appropriate bracket or brackets.
- If more space is needed to answer any question, please lengthen the document as necessary.

**Collaborator(s):**

Collaborators are the contact persons for election studies that appear in the CSES dataset - they are not necessarily the parties who collected the data. These collaborators and their contact information will be listed on the CSES website.

Name: Patrick Fournier Title: Professor Organization: Université de Montréal  Address: Département de science politique Université de Montréal C.P. 6128, Succ. Centre-ville Montréal QC, Canada H3C 3J7  Telephone: 01 514 343 6111 x54437 Fax: 01 514 343 2360 E-Mail: patrick.fournier@umontreal.ca Website: patrick-fournier.com	Name: Fred Cutler Title: Professor Organization: University of British Columbia  Address: Department of Political Science University of British Columbia C425 – 1866 Main Mall Vancouver B.C., Canada V6T 1Z1  Telephone: 01 604 822 6841 Fax: 01 604 822 5540 E-Mail: fred.cutler@ubc.ca Website:
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Name: Stuart Soroka Title: Professor Organization: University of Michigan  Address: Department of Communication Studies University of Michigan 5370 North Quad, 105 South State Street, Ann Arbor, Michigan, USA 48109-1285  Telephone: 01 734 647 0421 Fax: 01 734 764 3288 E-Mail: ssoroka@umich.edu Website: www.snsoroka.com	Name: Dietlind Stolle Title: Professor Organization: McGill University  Address: Department of Political Science McGill University 855 Sherbrooke Street West Montréal QC Canada H3A 2T7  Telephone: 01 514 398 4400 #089513 Fax: 01 514 398 4938 E-Mail: dietlind.stolle@mcgill.ca Website: www.profs-polisci.mcgill.ca/stolle/
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**Data Collection Organization:**

Organization that conducted the survey field work/data collection:

Organization: Institute for Social Research (Canada outside Quebec)  Address: York University 4700 Keele Street Toronto ON, Canada M3J 1P3  Telephone: 01 416 736 5061 Fax: 01 416 736 5749 E-Mail: isrnews@yorku.ca Website: www.isr.yorku.ca
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**Funding Organization(s):**

Organization(s) that funded the data collection:

Organization: Social Sciences and Humanities Research Council of Canada Address: 350 Albert Street P.O. Box 1610 Ottawa ON, Canada K1P 6G4  Telephone: 01 613 992 0691 Fax: E-Mail: research@sshrc-crsh.gc.ca Website: www.sshrc-crsh.gc.ca
Organization: Elections Canada Address: 257 Slater Street Ottawa ON, Canada K1A 0M6  Telephone: 01 613 993 2975 Fax: 01 613 954 8584 E-Mail: info@elections.ca Website: www.elections.ca

**Archiving Organization**

If appropriate, please indicate the primary location where the full, original election study dataset (not just the CSES portion) will be archived:

Website: <a href="http://ces-eeec.arts.ubc.ca">http://ces-eeec.arts.ubc.ca</a>
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Please indicate the date when the study is expected to be available at this archive:

It is available

**Study Design**

1. Timing of the study that the CSES Module was included in:  
 Post-Election Study

- Pre-Election/Post-Election Panel Study  
 Between Rounds

2a. Date Post-Election Interviewing Began:

October 20 2015

2b. Date Post-Election Interviewing Ended:

December 23 2015

3. Mode of interviewing for the post-election survey in which the CSES Module appeared:  
(If multiple modes were used, please mark all that apply.)

- In person, face-to-face  
 Telephone  
 Mail or self-completion supplement  
 Internet

4a. Was the survey part of a panel study?

- Yes  
 No

4b. If the survey was part of a panel study, please describe the design of the panel study, including the date at which interviewing for each prior wave began and ended:

Interviewing for the campaign study (CPS) began on September 8 2015. Except the first six days of calling and Thanksgiving Monday (October 12), between 78 and 168 interviews were completed each day until midnight of the evening before the October 19 election. In total, 4,202 CPS interviews were completed. Respondents were drawn from a new RDD sample.

The sample for the post-election surveys was comprised of respondents to the CPS. At the end of the CPS, the interviewer ensured that they had a first name or some other identifier (such as the respondent's initials or position in the household, e.g., mother). This information, as well as the sex and year of birth of the CPS respondent, and the respondent's telephone number, was recorded on a "cover sheet."

Calling for the post- election study (PES) started on October 20, the day after the election. The interviewer called and asked for the person by name or identifier. If there was any concern about reaching the correct person, the interviewer also checked age and gender. After 15 days of calling, 72 percent of the PES interviews were completed. By day 30, more than 87 percent of the interviews were completed. But small numbers of interviews were only completed by late December (last date of PES fieldwork: December 23). In total, 2,988 PES interviews were completed.

At the end of the post-election survey, respondents were asked to provide their address so they could be sent the mail-back survey (MBS). 30% of the PES respondents declined to provide an

address. The PES respondents who provided mailing addresses received up to five contacts encouraging them to complete and return the mail-back questionnaire. The number of mail-back completions was 1,289. Of those who provided an address and were sent the MBS, 62% returned a completed questionnaire, and this represents 43% of all PES respondents.

### **Translation**

Please provide copies of questionnaires in all languages used as part of the election study deposit. For questionnaires in a language other than English, please also provide a version of each translated back into English. Note: Questions are based on those developed for the ISSP.

5. Was the questionnaire translated?

- Yes, translated by member(s) of research team
- Yes, by translation bureau
- Yes, by specially trained translator(s)
- No, not translated

6. Please list all languages used for the fielded module:

English, French

7a. If the questionnaire was translated, was the translated questionnaire assessed/checked or evaluated?

- Yes, by group discussion
- Yes, an expert checked it
- Yes, by back translation
- Other; please specify: \_\_\_\_\_
- No
- Not applicable

7b. If the questionnaire was translated, was the questionnaire pre-tested?

- Yes
- No
- Not applicable

7c. If the questionnaire was translated, were there any questions which caused problems when translating?

- Yes
- No
- Not applicable

7d. If the questionnaire was translated, please provide a list of all questions which caused problems when translating. For each question listed, describe what problems were encountered and how they were solved:

Not applicable

### **Sample Design and Sampling Procedures**

8. Please describe the population that your sample is meant to be representative of:

The RDD sample for the 2015 campaign study was designed to represent the adult population of Canada: Canadian citizens 18 years of age or older who speak one of Canada's official languages, English or French, and reside in private homes in the ten Canadian provinces.

### **Eligibility Requirements**

9a. Must a person be a certain age to be interviewed?

Yes

No

If yes, what ages could be interviewed?

18 or older

9b. Must a person be a citizen to be interviewed?

Yes

No

9c. Must a person be registered to vote to be interviewed?

Yes

No

9d. Please list any other interviewing requirements or filters used:

None

### **Sample Frame**

10a. Were any regions of the country excluded from the sample frame?

Yes

No

If yes, what percent of the total eligible population did this exclude from the sample frame? 0.32%

If yes, please explain:

Residents of the three Northern territories were excluded. These territories contain only

0.32% of the population and are difficult to sample. Historically, the Canadian Election Study has not sampled them.

10b. Were institutionalized persons excluded from the sample?

Yes

No

If yes, what percent of the total eligible population did this exclude from the sample frame? Approximately 1%.

If yes, please explain:

Residents of old age homes, group homes, educational institutions and penal institutions were excluded from the sample.

10c. Were military personnel excluded from the sample?

Yes

No

10d. If interviews were conducted by telephone, what is the estimated percentage of households without a phone? 1.1%

10e. If interviews were conducted by telephone, were unlisted telephone numbers included in the population sampled?

Yes

No

10f. Were other persons excluded from the sample frame?

Yes

No

10g. Please estimate the total percentage of the eligible population excluded from the sample frame: 2.1%

### **Sample Selection Procedures**

11. Please describe, in your own words, how the sample for the study was selected. If the survey is part of a panel study, please also describe the original sample, from the beginning of the study.

CPS respondents come from a modified random digit-dialling (RDD) sample along with the birthday selection method within households was used for. All CPS respondents that could be contacted and that were willing took part in the PES survey. PES respondents were asked to provide their name and address for the mail-back survey (MBS).

12a. What were the primary sampling units?

Households

12b. How were the primary sampling units selected?

Households were selected by randomly selecting telephone numbers. To select numbers, ISR employs a modified form of random digit dialing. All telephone numbers in Canada consist of an area code, a “central office code” or exchange (the first three digits of the telephone number), and a suffix or “bank” (the last four digits of the number). A list of most telephone numbers in Canada can be constructed from CD-ROM versions of telephone books and other commercially available lists of telephone numbers. Numbers from these sources, as well as telephone numbers between or on either side of listed numbers are included in the sampling frame. For example, if the following telephone number were found in a directory, (416) 651-8513, then (416) 651-8512 and (416) 651- 8514 would be included in the sample. A computer is then used to generate a random sample of telephone numbers from this list. Unlisted numbers and numbers too new to be included in directories are interspersed among valid numbers.

12c. Were the primary sampling units randomly selected?

Yes

No

Please explain how the units were randomly selected. If the units were not randomly selected, please provide a justification for why the units were not randomly selected.

A modified form of random digit dialing (see 12b).

13. Were there further stages of selection?

Yes

No

13a. If there were further stages of selection, what were the sampling units at each of the additional stages?

The second stage of the sample selection process was the random selection of a respondent from the selected household. To be eligible for the interview, the household member had to be an adult (18 years of age or older) and a Canadian citizen. If there was more than one eligible person in the household, the person with the next birthday was selected as the survey respondent.

13b. If there were further stages of selection, how were the sampling units selected at each of the additional stages?

Birthday selection method (see 13a)

13c. If there were further stages of selection, were units at each of these stages randomly selected?



- Yes  
 No

Please explain how the units were randomly selected. If the units were not randomly selected, please provide a justification for why the units were not randomly selected.

Birthday selection method (see 13a).

14a. How were individual respondents identified and selected in the final stage?

Birthday selection method (see 13a)

14b. Could more than one respondent be interviewed from a single household?

- Yes  
 No

15. Did the sample design include clustering at any stage?

- Yes  
 No

16. Did the sample design include stratification?

Definition: Stratification involves the division of the population of interest according to certain characteristics (for instance: geographic, political, or demographic). Random selection then occurs within each of the groups that result.

- Yes  
 No

If yes, please describe (please include the list of characteristics used for stratification):

The sample was stratified by province. In terms of the percentage of sample per province, the design called for a slight over-representation of the six smaller provinces and Quebec, along with a corresponding under-representation in Ontario, Alberta and British Columbia.

17. Was quota sampling used at any stage of selection?

- Yes  
 No

18. Was substitution of individuals permitted at any stage of the selection process or during fieldwork?

- Yes  
 No

19. Under what circumstances was a household designated non-sample? Please check all that apply:

- Non-residential sample point  
 All members of household are ineligible  
 Housing unit is vacant  
 No answer at housing unit after \_\_\_20\_\_\_ callbacks

Other (Please explain):

Note: no answers were assumed to be non-households in the same proportion for non-answered numbers as for answered numbers.

20. Were non-sample replacement methods used?

- Yes  
 No

21a. For surveys conducted by telephone, was the sample a random digit dial (RDD) sample?

- Yes  
 No

21b. For surveys conducted by telephone, was the sample a listed sample?

- Yes  
 No

Note: list-assisted RDD

21c. For surveys conducted by telephone, was the sample a dual frame sample?

- Yes  
 No

22. For surveys conducted by mail, was the sample a listed sample?

- Yes  
 No

23. For surveys conducted on the Internet, did any respondents self-select into the survey?

Not applicable

### **Incentives**

24a. Prior to the study, was a letter sent to the respondent?

- Yes  
 No

24b. Prior to the study, was a payment sent to the respondent?

- Yes  
 No

24c. Prior to the study, was a token gift sent to the respondent?

- Yes  
 No

24d. Did respondent receive an additional payment after their participation? (Do not include any payment made prior to the study.)

- Yes  
 No

24e. Were any other incentives used?

- Yes  
 No

## **Interviewers**

25. Please describe the interviewers (e.g., age, level of education, years of experience):

Experience varied and averaged about 1.5 years. Age varied and averaged about 27 years old. Approximately 50% of the interviewers were university students, of which almost all were undergraduates. Of those who were not current students, a bachelors' degree was the most common level of education.

26. Please provide a description of interviewer training:

Training for new to ISR interviewers consists of three components. Interviewers attend a two-day workshop that includes both in-class and practice interviewing with each other. In-class training centers on the role of the interviewer, interviewer responsibilities and good interviewing techniques such as active listening and speaking skills as well as an explanation of the goals and history of the Canadian Election Study project and the need to protect confidentiality. Practice interviewing follows in-class training and includes CATI training as well as reading the questions and recording answers. Interviewers then proceed to 'cold calling' where they complete the CES survey with randomly selected respondents who are not from the study sample. Quality control monitors or supervisors listen to the new interviewers; provide feedback, and when the recruit demonstrates proper interviewing skills promotes them to be an interviewer on the main study.

Established interviewers who were trained to work on the CES reviewed the CATI questionnaire on a screen as if they were completing an interview, attended a classroom session about the project and completed a practice interview before being placed on the main study.

For the CPS and PES, supervisors monitored (listened to) about 10 percent of interviewers' calls to verify that the interviewers were reading questions and recording answers correctly.

## **Contacts**

27a. What was the average number of contact attempts made per household, for the entire sample?

3.4 for CPS, 4.3 for PES.

27b. For households where contact was made, what was the average number of contact attempts prior to first contact?

Attempts	CPS		PES	
	#	%	#	%
1	1,241	29	822	27
2	934	22	575	19
3	583	14	383	13
4	412	10	290	10
5	287	7	214	7
6-9	548	13	376	13
10-14	158	4	189	6
15 or more	39	1	139	5
<b>Totals</b>	<b>4,202</b>	<b>100</b>	<b>2,988</b>	<b>100</b>

27c. During the field period, how many contacts were made with the household before declaring it a **non-sample**?

No sample was declared as non-sample. For the 'ring-no-answers' and 'always-busy' numbers in the sample, a minimum of 20 calls were made and it was assumed, for response rate calculations, that the proportion of these numbers that were households was the same as in the rest of the sample (see household eligibility rate in the response rate section).

28d. During the field period, how many contacts were made with the household before declaring it a **non-interview**?

A minimum of 20 calls.

28e. During the field period, what were the maximum number of days over which a household was contacted?

10 days for the CPS and 30 days for the PES.

28f. During the field period, did interviewers vary the time of day at which they re-contacted the household?

Yes

No

If yes, please describe:

In order to maximize the chances of getting a completed interview from each telephone number in the CPS sample, call attempts were made during the day and the evening - for both week and weekend days. Typically, between two and four call attempts were made each day (split between

day and evening hours) during the first four days that a sample was released.

### **Refusal Conversion**

29a. Were efforts made to persuade respondents who were reluctant to be interviewed?

Yes

No

Please describe:

Efforts were made to “convert” refusers on both the CPS and PES. Respondents and/or households who refused to participate when initially contacted by an interviewer were contacted a second time in both surveys. (Often, several call attempts were required to reach refusers.) In the CPS, refusal conversion attempts had to be made within the 10 day calling period, whereas in the PES the conversion attempts were typically made two or three weeks after the initial refusal. The number of converted refusals is 234 in the CPS and 144 in the PES.

29b. Were respondents who were reluctant to be interviewed sent a letter persuading them to take part?

Yes

No

29c. Was payment offered to respondents who were reluctant to take part?

Yes

No

29d. Were respondents who were reluctant to take part turned over to a more experienced interviewer?

Yes

No

29e. What was the maximum number of re-contacts used to persuade respondents to be interviewed?

Two

29f. Were any other methods used to persuade respondents reluctant to be interviewed to take part?

Yes

No

### **Interview/Survey Verification**

Definition: Interview/survey verification is the process of verifying that an interview was conducted and that the survey was administered to the correct respondent, for quality control purposes.

30. Was interview/survey verification used?

Yes

No

Note: about 10% of all interviews were monitored by a supervisor.

### **Response Rate**

Note: If multiple modes of interviewing were used for the post-election survey in which the CSES Module appeared, please repeat the following questions as appropriate for each of the modes used.

31. What was the response rate of the survey that the CSES Module appeared in? Please show your calculations. (If the CSES Module appeared in a panel study, please report the response rate of the first wave of the study, even if the CSES Module did not appear in that wave.)

The response rate was defined as the number of completed interviews divided by the estimated number of eligible households times 100 percent.

Details on the calculation of the response rate for the 2015 CPS are as follows. Of the 14,976 telephone numbers included in the sample, 10,327 were identified as being eligible households (completions [n=4,202] + refusals [n=3,801] + call backs [n=2,324]). Not eligible households (where the respondent was unable to speak English or French, was not physically or mentally healthy enough to complete the interview, was not a Canadian citizen, etc. [n=1,106]), and non-residential and not-in-service numbers ([n=2,279]) accounted for 3,385 of the telephone numbers. It was not possible to determine the eligibility status for 1,264 of the sample telephone numbers. For response rate calculations, it was assumed that the proportion of these 1,264 numbers which were eligible household numbers was the same as it was in the rest of the sample. This proportion, or “household eligibility rate” was  $.753$  (eligibles [10,327]/(eligibles [10,327] + not eligibles [3,385]) =  $.753136$ ). The estimated total number of eligibles was then computed as  $11,279$  ( $10,327 + [.75 \times 1,264] = 11,279$ ). Dividing the number of completions (4,202) by the estimated number of eligibles (11,279) gives a final response rate of 37%.

The PES reinterview rate in 2015 was 71%.

For the MBS: of those who provided an address at the end of the PES (70%) and were sent the MBS, 62% percent returned a completed questionnaire. This represents 43% of the respondents to the PES.

32. Please provide the following statistics for the survey that the CSES Module appeared in. (If the CSES Module appeared in a panel study, please report the statistics for the first wave of the study, even if the CSES Module did not appear in that wave.)

Results	number	percent
completions	4,202	28
refusals	3,801	25
call backs	2,324	16
ill/aged/language problem/absent/not a citizen/died	1,106	7
not-in-service & non-residential	2,279	15
eligibility not determined	1,264	9
<b>total sample of numbers</b>	<b>14,976</b>	<b>100</b>
total number of households determined eligible	10,327	
total number of households determined not eligible	3,385	
household eligibility rate	.753136	
estimated number of eligible households	11,729	
response rate	37	

33. If the CSES Module appeared in a panel study, how many waves were conducted prior to the wave that included the CSES Module?

The CSES module was split among the CPS, PES and MBS. Most of the module appeared in the MBS.

34. If the CSES Module appeared in a panel study, what was the total panel attrition between the first wave of the study and the wave that included the CSES Module? Please show your calculations.

See response to 31.

35. If the CSES Module appeared in a panel study, please provide the number of completed interviews for the wave that included the CSES Module:

See response to 31.

36. If the CSES Module appeared in a panel study, please provide the following statistics for panel attrition by age and education. In each cell, indicate the percent of all completed interviews in each category for the indicated wave.

<b>Age</b>	<b>CPS</b>	<b>PES</b>	<b>MBS</b>
18-25	6.5%	5.5%	4.0%
26-40	14.5%	14.4%	11.7%
41-64	50.5%	51.3%	51.3%
65 and over	28.4%	28.8%	32.9%
<b>Education</b>	<b>CPS</b>	<b>PES</b>	<b>MBS</b>
None	0.1%	0.1%	0.1%
Incomplete primary	0.5%	0.3%	0.0%
Primary completed	1.4%	1.2%	0.3%
Incomplete secondary	6.7%	5.9%	4.8%
Secondary completed	18.2%	17.6%	16.5%
Post-Second. Trade/Vocational	28.9%	28.1%	26.3%
University incomplete	6.8%	7.3%	8.1%
University degree	37.3%	39.6%	43.9%

### Post-Survey Adjustment Weights

37. Are weights necessary to make the sample representative of the populated being studied?

Yes

No

If yes, please explain:

The national sample weight is required to correct for disproportionalities in the probability of selection based on household size and province of residence.

38. Are weights included in the data file?

Yes

No

39. If weights are included in the data file, please describe in detail how the weights were constructed:

In order to produce national estimates, it is advisable to correct for both the unequal probabilities of selection at the household stage and the unequal probabilities of selection based on province of residence. The variable "Weight to sample" is the product of a household weight and a province weight.

Household weight: The probability of an adult member of the household being selected for an interview varies inversely with the number of eligible adults living in that household. In a household with only one adult, this person has a 100 percent chance of selection, in a two-adult household, each adult has a 50 percent chance of selection, and so on. Analyses based on unweighted estimates are therefore biased: members of one adult households are over-represented, and larger households with two or more adults are under-represented.



Province Weight: Because the sample was stratified, the distribution is not proportional to the population size of the provinces. Therefore, the data must be weighted before national estimates are derived. (No province weight is required in comparisons between provinces.) Weights are obtained by dividing the proportion of households in the province by the proportion of the households in the sample for that province.

40a. If weights are included in the data file, are the weights designed to compensate for disproportionate probability of selection?

- Yes
- No

If yes, please describe:

See response to 39.

40b. If weights are included in the data file, are the weights designed to match known demographic characteristics of the population?

- Yes
- No

40c. If weights are included in the data file, are the weights designed to correct for non-response?

- Yes
- No

40d. If weights are included in the data file, are the weights designed to correct to the official election results?

- Yes
- No

41. Comparison of Completed Interviews to Population (please provide as percentages of the total):

Characteristic	<u>Population Estimates</u>	<u>Completed Interviews</u>	
		<u>Unweighted Distribution</u>	<u>Weighted Distribution</u>
<u>Age</u>			
18-25	%	4.2%	6.5%
26-40	%	13.6%	14.5%
41-64	%	48.5%	50.5%
65 and over	16.9%	33.7%	28.4%
<u>Education</u>			
None	%	0.1%	0.1%

Incomplete Primary	%	0.7%	0.5%
Primary Completed	%	1.6%	1.4%
Incomplete Secondary	%	7.7%	6.7%
Secondary Completed	%	18.4%	18.2%
Post-Secondary Trade/ Vocational	%	27.9%	28.9%
University Incomplete	%	6.8%	6.8%
University Degree	25.9%	36.8%	37.3%
<u>Gender</u>			
Male	49.1%	45.9%	47.7%
Female	50.9%	54.1%	52.3%

Note: population data are not available for most of these age and education categories.

42. Please indicate the source of the population estimates in the prior question. English language sources are especially helpful. Include website links or contact information if applicable.

Age: <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=01&Geo2=PR&Code2=01&Data=Count&SearchText=Canada&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1>

Education: <http://www12.statcan.gc.ca/census-recensement/stats/statgeo.cfm?LANG=E&PRCODE=01>

Gender: <http://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=01&Geo2=PR&Code2=01&Data=Count&SearchText=Canada&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1>