

Collecting time use data: future directions - the Canadian experience

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November 15, 2018
Seventh Global Forum on Gender Statistics

www.statcan.gc.ca

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STATISTICS CANADA
ONE HUNDRED YEARS AND COUNTING



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Overview

- A brief history of time use
- The General Social Survey on Time Use
- Adapting to changing collection techniques
- Examining the mode effects
- What we learned in 2015
- Moving forward – GSS Modernization



Time use and unpaid work in Canada

1971

Statistics Canada estimates that household work represents 41% of Canada's GDP

1978

Estimating the Value of Unpaid Work in Canada published

1981

National pilot of time use study

1996

Questions on unpaid work added to the Census

The General Social Survey on Time Use

Time Use data are collected as part of the Canadian General Social Survey program (GSS)

- The GSS program runs yearly and cyclically collects information on different topics
Time Use, Victimization, Caregiving and Care Receiving, Families, Social Identity and Giving, Volunteering and Participating
- Time Use data are collected every 5 to 7 years (1986, 1992, 1998, 2005, 2010 and 2015)

How do we collect time use data?

Roster used to determine respondent

Respondents assigned a reference day when the sample is created

Complete a retrospective 24-hour diary of day-to-day activities

Location of the activity and who they were with

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How do we collect time use data

We also ask:

household composition, labour force status, life satisfaction, unpaid work, time perceptions and pressures, and participation in sports and cultural activities

...along with numerous socio economic characteristics.

Evolution of the instrument

- Initially in 1986 used 84 activity codes, increased to 264 in 2010
- 2010 also collected simultaneous activities
- 2015 used Electronic Questionnaire for the first time
 - 64 activity codes (use of a light diary)
 - New mode of collection could not adapt to past 3-tier activity coding
 - Up to 2 pre-defined simultaneous activities were collected with each main activity (but not duration)





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What we learned in the qualitative analysis of the 2015 pilot survey

CATI VS Electronic Questionnaire Mode effect

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Respondent characteristics

CATI respondents

84% had at least a high school diploma

31% had a University degree or more

49 % were working

19% had a child in the household

8% were aged 15-24

Electronic Questionnaire respondents

97% had at least a high school diploma

47% had a University degree or more

54 % were working

18% had a child in the household

3% were aged 15-24

Qualitative results of the pilot survey

Reference day distribution



CATI respondents

➤ highest number of completed diaries

- ✓ Monday
- ✓ Sunday
- ✓ Saturday

➤ lowest number of completed diaries

- ✓ Wednesday
- ✓ Tuesday
- ✓ Thursday

EQ respondents

➤ highest number of completed diaries

- ✓ Tuesday
- ✓ Wednesday
- ✓ Friday

➤ Lowest number of completed diaries

- ✓ Saturday
- ✓ Sunday
- ✓ Monday

2015 Collection Issues

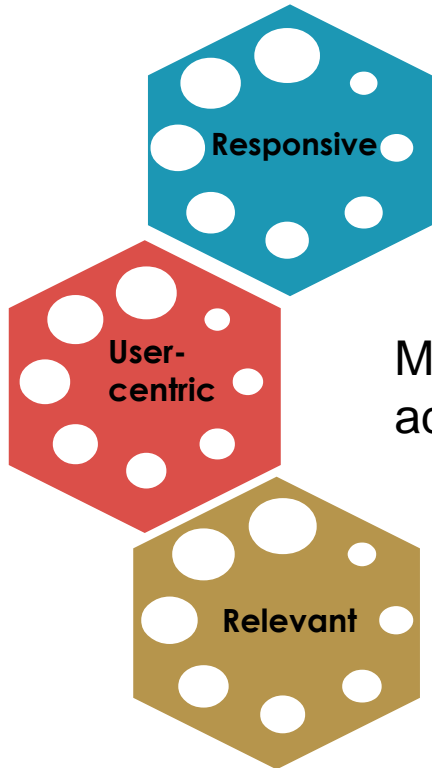
- Telephone frame no selected respondent
 - Priority rules applied
 - Rostering process limited EQ

- EQ acceptance \approx disguised refusal
 - Additional script added

- Collection started with CATI only
 - Migration to a new EQ system version



Statistics Canada transformation



Moving beyond a survey-first approach with **new methods** and **integrating data** from a variety of existing sources

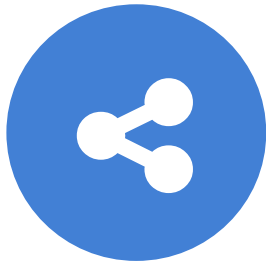
Making data **easier to access** and use by adopting **new tools** to analyze and visualize data

Enabling Canadians to use data to make **evidence-based decisions**

Enabling efficient data management and access

The General Social Survey – Why Modernize?

- Today's reality is one of rapidly changing and increasingly complex economies and societies, driven by a data revolution, ingenuity and innovation
- This has led to the proliferation of data and data providers and increased user expectations and demand for micro/detailed data in real-time
- Statistics Canada is renewing and modernizing to address these challenges, a process based on five pillars:



Sharing and
collaboration



User-centric
service delivery



Leading edge
methods and
data integration



Statistical
capacity
building and
leadership



Modern
workforce and
flexible
workplace

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2018-2019: Using EQGS 3.2.3 to conduct Time Use “Evolutionary” experiments

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Test # 1



Reference day

vs.



Yesterday Method

Test # 2



Targeted respondent

vs.



Age-order selection

Test # 3



Carrot Incentive

vs.



Historical data incentive

vs.

No incentive

Test # 4



Letter reminders

vs.



Email reminders

vs.



SMS reminders

Is there an app for that?



MOBILE APP
(with seamless integration into
web application)



DIARY
(with on-the-go collection
functionality)



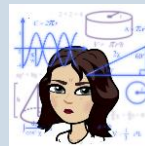
ESM
(Experience Sampling Method with
random time-triggered questions on
subjective-wellbeing)



GEODATA
(with potential to incorporate beacon
and geo-fencing technologies to
trigger surveys)



VOICE RECOGNITION
(respondent data entry)



MACHINE LEARNING
(for coding)

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Contact



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