A Validation Study on Voter Turnout Bias in Switzerland

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Outline

- Introduction
- Our study
- Results
- Conclusions
Introduction: Voter Turnout Bias in Switzerland

![Graph showing voter turnout over time with different data sources]

Source: Own calculations based on the most recent VOX dataset.

Hugi/Jann (University of Bern)
Introduction: Research Questions

- What are the mechanisms that lead to the observed turnout bias in Swiss voting and election studies?
- How much do the different mechanisms contribute to the total bias?
- Is it possible to reduce the bias by special questioning techniques or weighting schemes?
Introduction: Types of Biases

- **Undercoverage**
  - Sampling frames typically do not cover the whole population.
  - Political participation is likely to be lower among uncovered subpopulations (e.g., young people without landline) than among covered subpopulation, leading to a positive bias in survey estimates of voter turnout (Mokrzycki, Keeter und Kennedy 2009, Blumberg und Luke 2007)

- **Nonresponse**
  - Participation in surveys correlates with political interest and political participation (Voogt und Saris 2003, Jackman 1999, Brehm 1993).

- **Misreporting**
  - Due to social desirability (Tourangeau und Yan 2007) and recall errors (Belli et al. 1999), respondents tend to overreport their participation behavior.
Introduction: Types of Biases

Measurement

Construct

Measurement

Response

Edited response

Survey estimate

Representation

Target population

Coverage error

Sampling frame

Sampling error

Sample

Nonresponse error

Respondents

Adjustment error

Postsurvey adjustments

Validity

Measurement error

Processing error

(Groves et al. 2009:48)
Our Study

- Voter turnout validation study comparing survey data to registered polling cards at a small municipality in Switzerland.

- Polling cards
  - Citizens who took part in the vote can be identified from the collected polling cards.

- Survey
  - Gross sample of 2000 citizens from the municipality’s register.
  - Net sample of 1696 (84.8%) citizens whose households could be found in the telephone register.
  - CATI survey between September 23 and October 20 with 893 respondents (52.7% of net sample).
  - Questions on: political interest, participation in the September 22 vote and other votes, social desirability of voting, key indicators of political participation research, social demographics.
  - Wording experiment for the September 22 voting question.
Main Results

59.2%  
N=4559

Population
Gross sample
No telephone
Net sample
No interview
Interviewed sample
Self-report

Turnout (in percent)
Main Results

59.2% N=4559
59.3% N=2000

Turnout (in percent)
Main Results

- Population: 59.2% (N=4559)
- Gross sample: 59.3% (N=2000)
- No telephone: 35.5% (N=304)
- Net sample: 63.4% (N=1696)

Turnout (in percent)

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Main Results

- Population: 59.2%, N=4559
- Gross sample: 59.3%, N=2000
- No telephone: 35.5%, N=304
- Net sample: 63.4%, N=1696
- No interview: 53.1%, N=803
- Interviewed sample: 72.6%, N=893

Turnout (in percent)
Main Results

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## Over- and Underreporting

<table>
<thead>
<tr>
<th>self-report</th>
<th>did not vote</th>
<th>voted</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>polling cards</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– did not vote</td>
<td>69.6</td>
<td>30.4</td>
<td>100.0</td>
</tr>
<tr>
<td>– voted</td>
<td>0.4</td>
<td>99.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

(N = 893)
Sociodemographic Profiles

Average marginal effects from logistic regressions
Determinants of Overreporting

Political interest (1–5)  
Party member  
Left–right (0–10)  
Voting is civic duty  
Internal political efficacy (1–5)  
External political efficacy (1–5)  
Most people in own circle vote  
People in own circle would not like it if I don't vote  
Female  
Tertiary education  
Age (ref = 18 – 34):  
  35 – 49
  50 – 64
  65 or older

Average marginal effects (N=183, R^2_{MF}= .139)
Wording Experiment

- The sample was randomized into a control group and a treatment group.
- The control group received a standard voting question.
  - „How about you, did you vote or not?“
- The treatment group received a modified voting question intended to minimize social-desirability bias and recall errors.
  - „Please try to remember whether you read the voting documents and whether you voted in person or by mail. Which of the following statements does apply to you?“
    - ★ I did not vote.
    - ★ I thought about voting, but did not.
    - ★ I usually vote, but did not this time.
    - ★ I am sure I did vote.
Wording Experiment: Results

![Bar chart showing voter turnout by method and group.](chart)

- **Control group (N = 438)**
  - Polling cards: 75%
  - Self-report: 80%

- **Experimental group (N = 455)**
  - Polling cards: 85%
  - Self-report: 90%

Note: The chart indicates a higher voter turnout for the experimental group compared to the control group, with self-report methods generally showing higher turnout than polling cards.

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Wording Experiment: Results

Control group (N = 438)

Experimental group (N = 455)

bias
overreporting
underreporting
Summary and Conclusions

- Undercoverage, nonresponse, and overreporting jointly contribute to the participation bias in survey data.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Sampling error</td>
<td>0.4%</td>
</tr>
<tr>
<td>Undercoverage</td>
<td>19.2%</td>
</tr>
<tr>
<td>Nonresponse</td>
<td>43.0%</td>
</tr>
<tr>
<td>Overreporting</td>
<td>37.4%</td>
</tr>
<tr>
<td><strong>Total bias (21.5 pp)</strong></td>
<td><strong>100.0%</strong></td>
</tr>
</tbody>
</table>

- Undercoverage, nonresponse, and overreporting have differential sociodemographic profiles.
- The errors potentially affect associations and regression models estimated from survey data. Overreporting appears particularly problematic.
- Effort should be put into improving survey measurements of political participation and new correction methods should be developed.
- However: Surveys will always remain an approximate science.
References