DECLINING RESPONSE RATES AND THEIR IMPACT

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Evidence and contributions supplied by:
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BACKGROUND: WHAT HAS BEEN HAPPENING TO RESPONSE RATES
SURVEY RESPONSE RATES BY YEAR: AVERAGE

Response Rate change (%)


Average
SURVEY RESPONSE RATES BY YEAR: DETAIL

- Crime Survey for England and Wales
- British Social Attitudes
- Health Survey for England
- Family Resources Survey
- Living Costs and Food Survey
- Labour Force Survey
- National Travel Survey
- Average
SURVEY RESPONSE RATES: CHANGE OVER TIME

Response Rate change (%)

-30 -25 -20 -15 -10 -5 0 5

National Travel Survey
BARB
Crime Survey for England
Citizenship/Community Life Study
Scottish Crime and Justice Survey
Family Resources Survey
British Social Attitudes
Scottish Health Survey
Scottish Social Attitudes
Living Costs and Food Survey
Health Survey for England
Labour

POSSIBLE EXPLANATIONS

- Less trust in government, brands and professions
- Survey fatigue
- Availability
- Accessibility
MAJOR FACTORS AFFECTING RESPONSE

FIELDWORK
- Volumes & allocation
- Management
- Reissues

PARTICIPANT COMMUNICATIONS
- Messaging
- Channels
- Volume
- Timing

SURVEY DESIGN
- Sample type
- Geography
- Clustering
- Sample data
- Selection method
- Interview length
- Topic
- Mode

INCENTIVE
- Type
- Value

INTERVIEWER/NURSE
- Training
- Motivation
- Management

Societal change
LEVELS OF EFFORT TO MAINTAIN RESPONSE
- All three surveys have maintained low non-contact rates
  - CSEW c. 3-4%
  - BSA c. 6-7%
  - BARB c. 15% > c. 10%

- Refusal rates have crept up especially in last few years
  - CSEW c. 20% > c. 24%
  - BSA c. 40% > c. 43%
  - BARB c. 17% > 25%
MORE EFFORT BEING PUT IN TO KEEP RESPONSE RATES UP

![Bar chart showing response rates for BSA, BARB, and CSEW from 2008-9 and 2015-16]
### More effort being put in to keep response rates up

<table>
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<th>2008/9</th>
<th>2015/16</th>
<th>% increase</th>
<th>Extra calls per year</th>
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<tbody>
<tr>
<td>BSA (2008-2016)</td>
<td>4.7</td>
<td>5.2</td>
<td>11%</td>
<td>c. 4,000</td>
</tr>
<tr>
<td>BARB (2009-2015)</td>
<td>3.9</td>
<td>4.8</td>
<td>23%</td>
<td>c. 72,000</td>
</tr>
<tr>
<td>CSEW (2008-2016)</td>
<td>4.1</td>
<td>5.2</td>
<td>27%</td>
<td>c. 55,000</td>
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INCREASING EFFORT TO MAINTAIN INTERVIEWER PANELS

Challenges include:
- Recruitment
- Retention
- Engagement
- Response rate targets

![Interviewer turnover across agencies chart]

Joiners | Leavers | Panel Size
---|---|---
2012: 1444 | 1180 | 3698
2013: 1593 | 1021 | 3367
2014: 11116 | 3271 | 3271
2015: 132137 | 3002 | 3002
2016: 11491 | 1180 | 2797

Leavers as % Total Panel:
- 2012: 32%
- 2013: 47%
- 2014: 35%
- 2015: 46%
- 2016: 53%
IS IT WORTH THE EFFORT (AND COST) TO MAINTAIN RESPONSE?
Response rates and relationship with survey error
We worry about non-response because it can cause survey error.

We care most about non-response bias: difference between estimates for survey respondents and overall population.

Non-response bias (NR bias) for variable Y increases with:

1. correlation between Y and likelihood of responding
2. (inversely with) response rate

NR bias:

- is variable-specific: wide range of NR bias values in a single survey
- increases as response rate decreases only if non-zero correlation between response rates and variables
- but not by much unless correlation is substantial
RESPONSE RATE AND NON-RESPONSE BIAS

Relationship between RR and NR bias open; requires empirical assessment

Two types of empirical study:

1. Where estimate of “true” value of variable – difference from estimate for survey respondents = estimate of absolute NR bias

2. Assess how survey estimates change with increasing fieldwork effort (e.g. number of contact attempts, extent of reissuing). Look at impact of FW efforts on relative NR bias (strong assumption that estimate changes reflect reduced NR bias – might be wrong!)
EMPIRICAL EVIDENCE

Number of studies - generally point in same direction. We summarise two illustrative studies:


Meta-analyses (59 studies / 959 estimates)
Measured absolute NR bias
Very low correlation between RR and NR bias
Greater variation *within* studies than between them
Six recent Kantar Public surveys; all (541) non-demographic items

Relative bias (*distance from final estimate*) measured after different FW effort levels:

- 1 call (RRs=7-22%)
- 2 calls
- 3 calls
- 5 calls
- final estimates (RRs = 55-76%)
Average error after call 1 = 1.1% pts after calibration weighting
Average error after call 2 = 1.0% pts after calibration weighting
Study estimated that a 4-call rule leads to lowest # of total calls (hence, lowest cost)

On average, questions about beliefs and attitudes tended to respond to FW effort slightly more than questions about behaviour
Small number of variables with high relative bias (internet use, freq. of being in during day, freq. of going to pub) – but considerable reduction after 3 calls
BROAD CONCLUSIONS FROM EMPIRICAL EVIDENCE

RR - NR bias relationship generally weak

However, for some variables in some studies extended FW efforts make bigger difference – eg volunteering rates
Conclusions and implications
HOW MUCH SHOULD WE WORRY ABOUT DECLINING RESPONSE RATES?

1: How vulnerable to NR bias are the key variables?

Weighted survey estimates for most variables largely unaffected by response rate variations within observed ranges

However occasional exceptions where RR has greater impact on NR bias: e.g. volunteering and web usage - do you have any such variables? (literature / earlier survey data...)

2: Will marginal increases in NR bias compromise conclusions?

Even with highest achievable response rates, levels of absolute NR bias may still be substantial

Often trends of greater interest than point estimates. NR bias probably relatively constant over time - little impact on trend lines
3: Are there better ways of reducing NR bias?
Blanket increase in RR often poor method for reducing NR bias
Address NR bias in other ways? – e.g. target increased FW efforts on selected non-responders identified through supplementary variables
Response rates are declining
And fieldwork efforts and costs are increasing
Observed impact of response rates on survey estimates usually modest
Pursuit of highest possible response rates may not be best use of limited survey resources – may be better ways of addressing survey errors
Making considerable efforts to maximise response rates can be justified where minimising NR bias critical to conclusions
But often it isn’t