

DECLINING RESPONSE RATES AND THEIR IMPACT

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Evidence and contributions supplied by:



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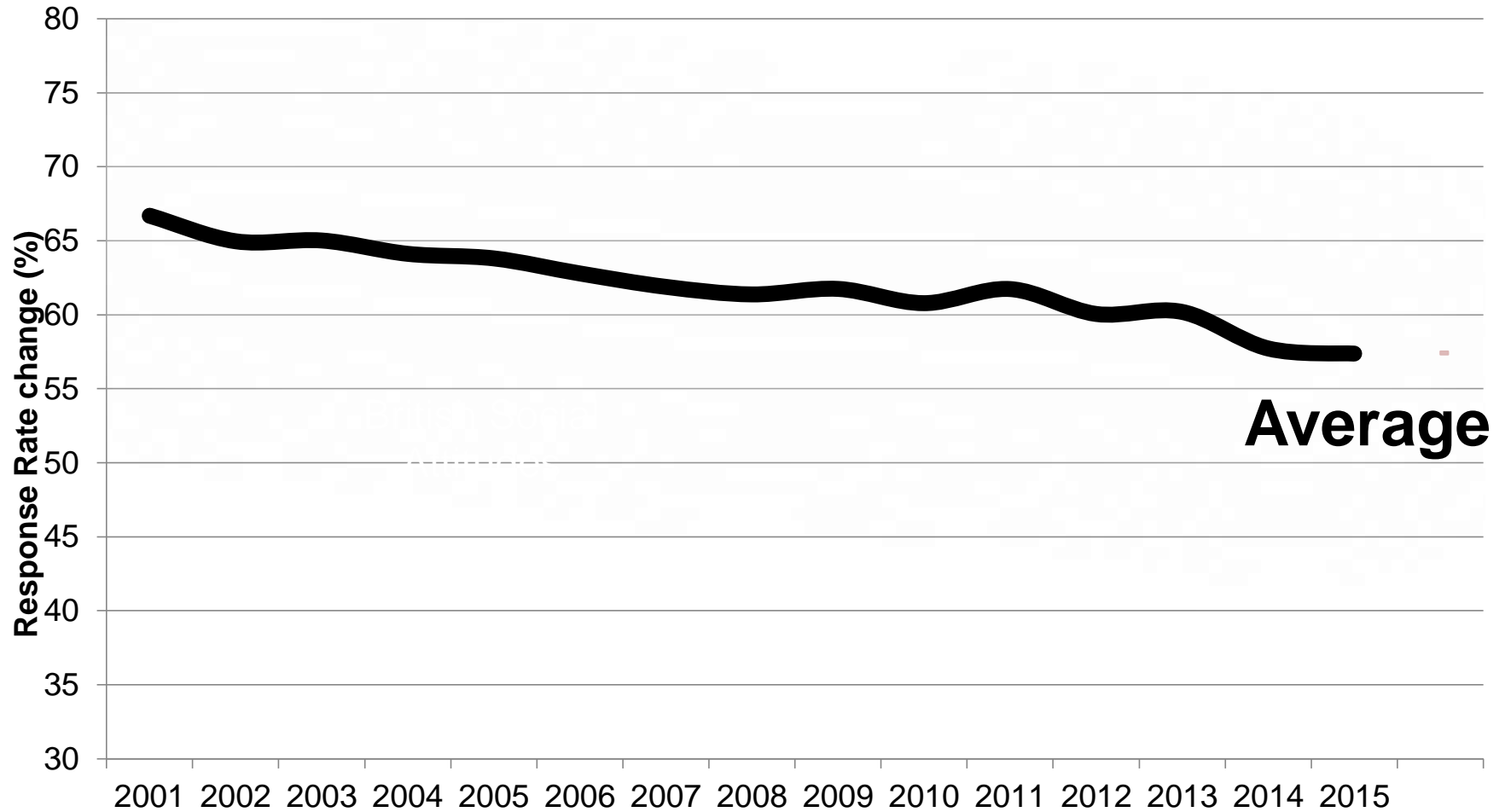
- 1 | What has been happening to response rates in face-to-face cross-sectional surveys?
- 2 | Levels of effort needed to maintain response
- 3 | Response rates and relationship with survey error
- 4 | Conclusions and implications

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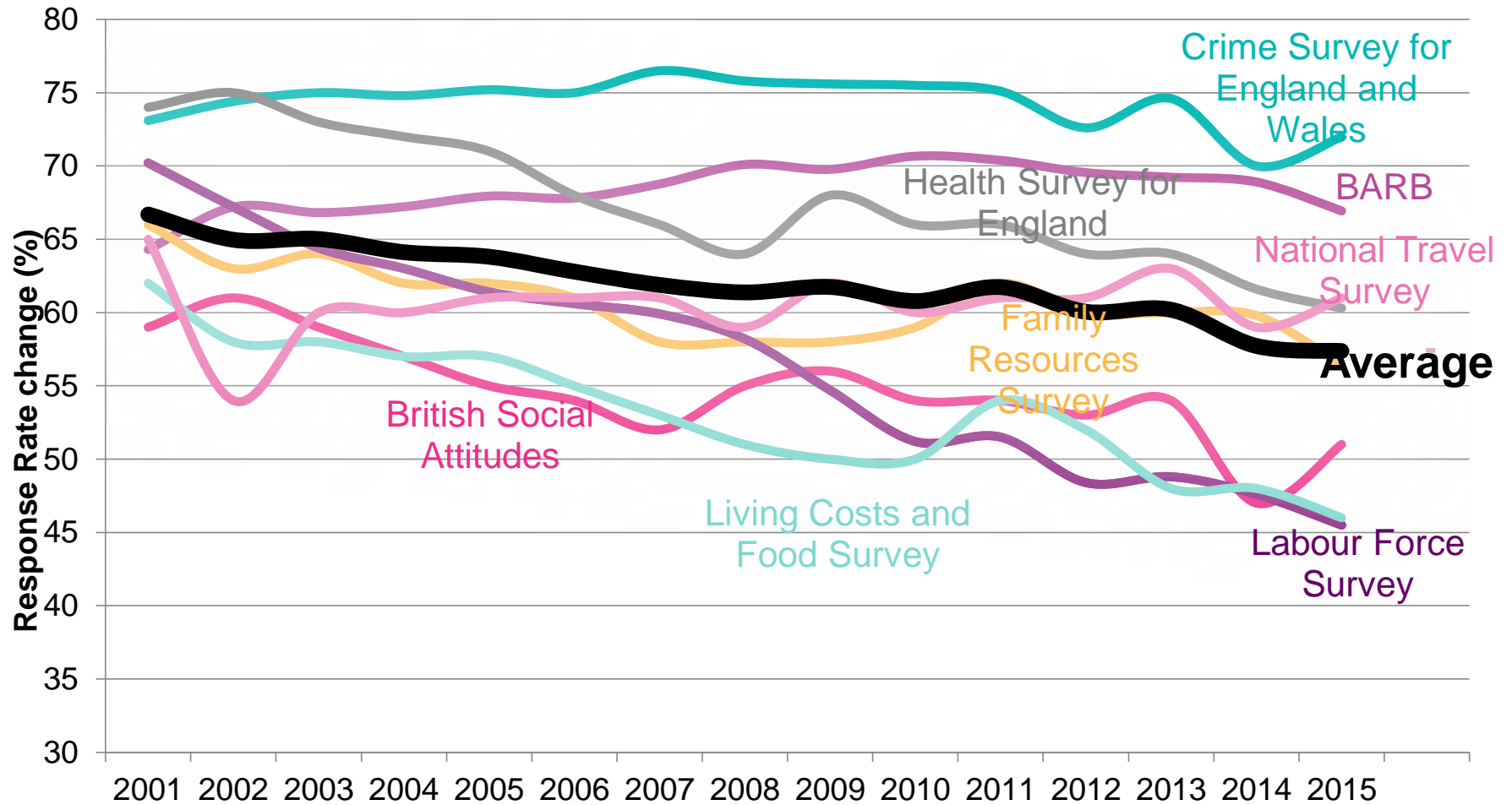
BACKGROUND : WHAT HAS BEEN HAPPENING TO RESPONSE RATES



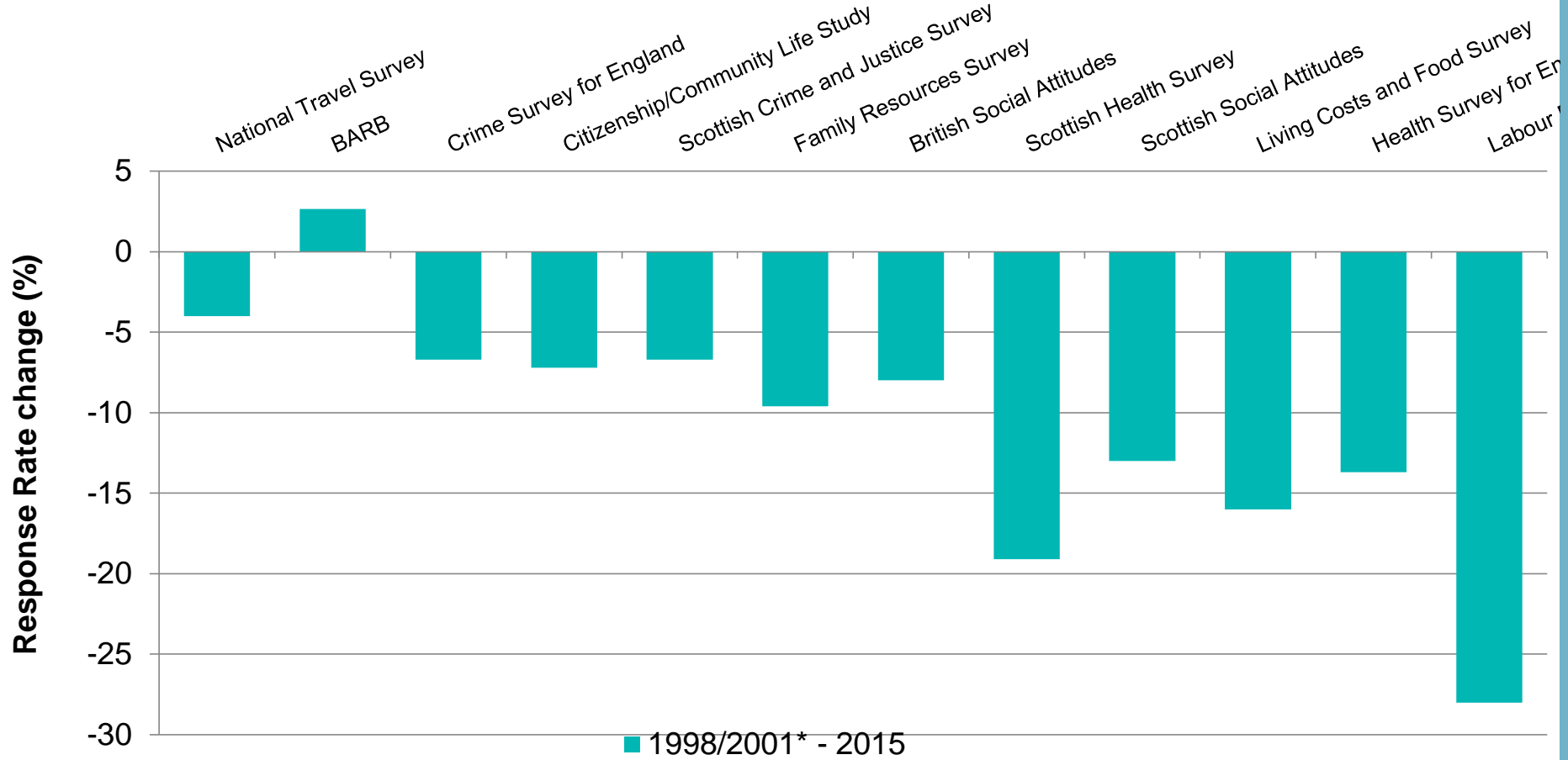
SURVEY RESPONSE RATES BY YEAR: AVERAGE



SURVEY RESPONSE RATES BY YEAR: DETAIL



SURVEY RESPONSE RATES: CHANGE OVER TIME



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
- Volume
- Channels
- Timing

Societal change

SURVEY DESIGN

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

Response rate

INCENTIVE

- Type
- Value

INTERVIEWER/NURSE

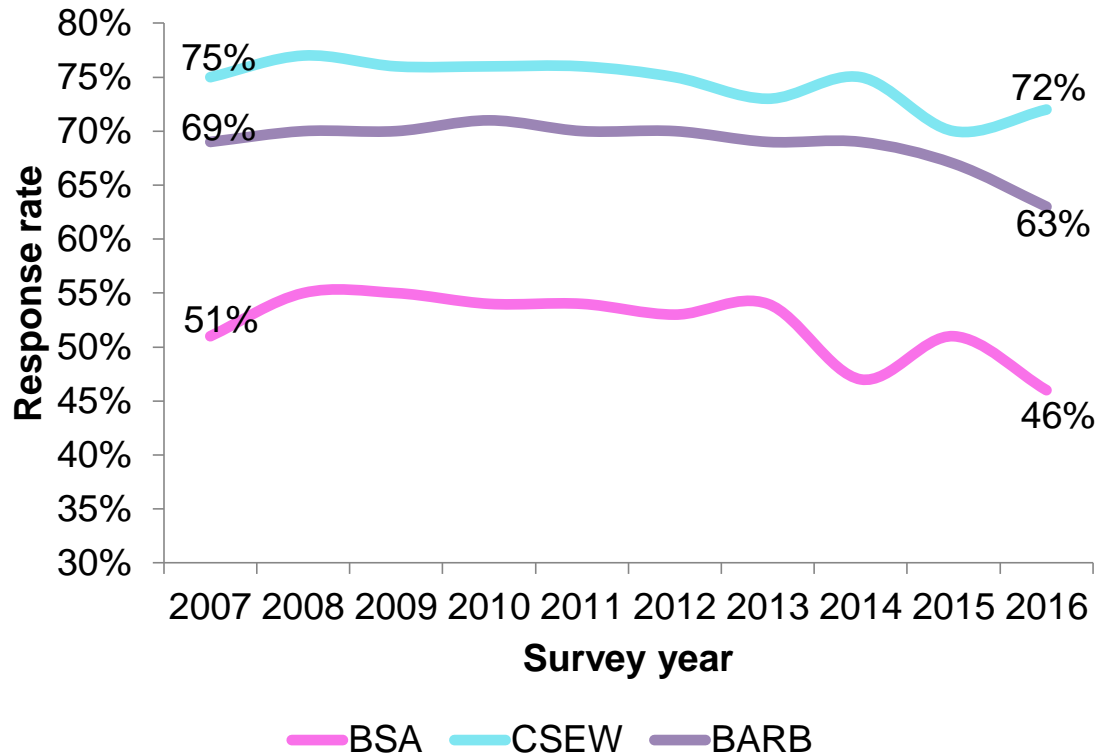
- Training
- Management
- Motivation

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LEVELS OF EFFORT TO MAINTAIN RESPONSE

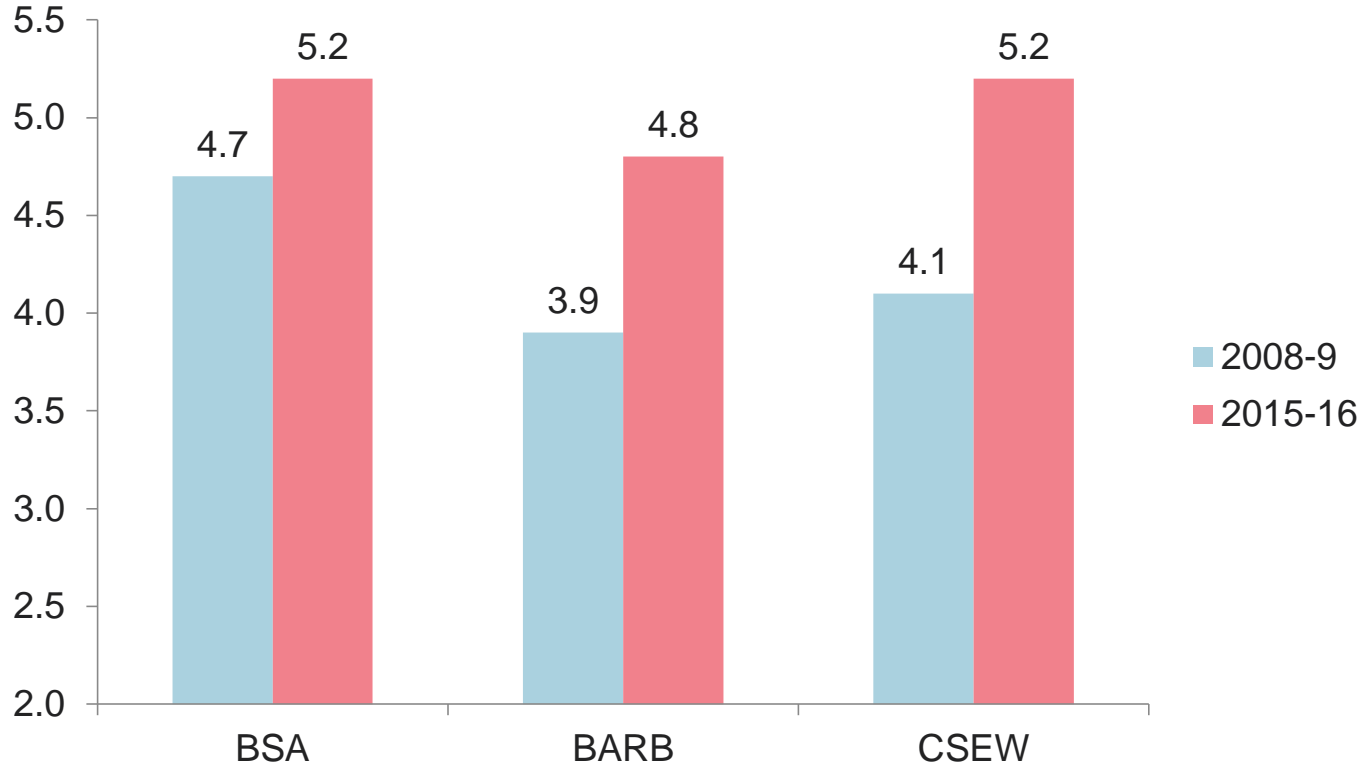


CASE STUDY RESPONSE RATES



- 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

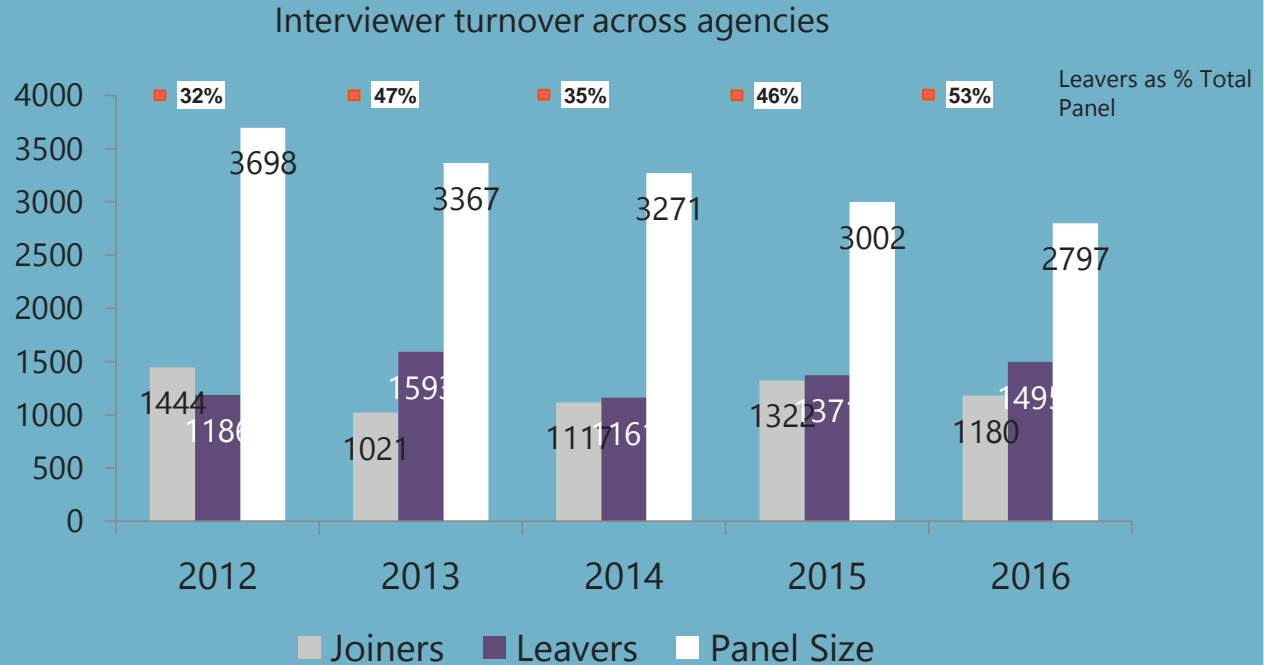


MORE EFFORT BEING PUT IN TO KEEP RESPONSE RATES UP

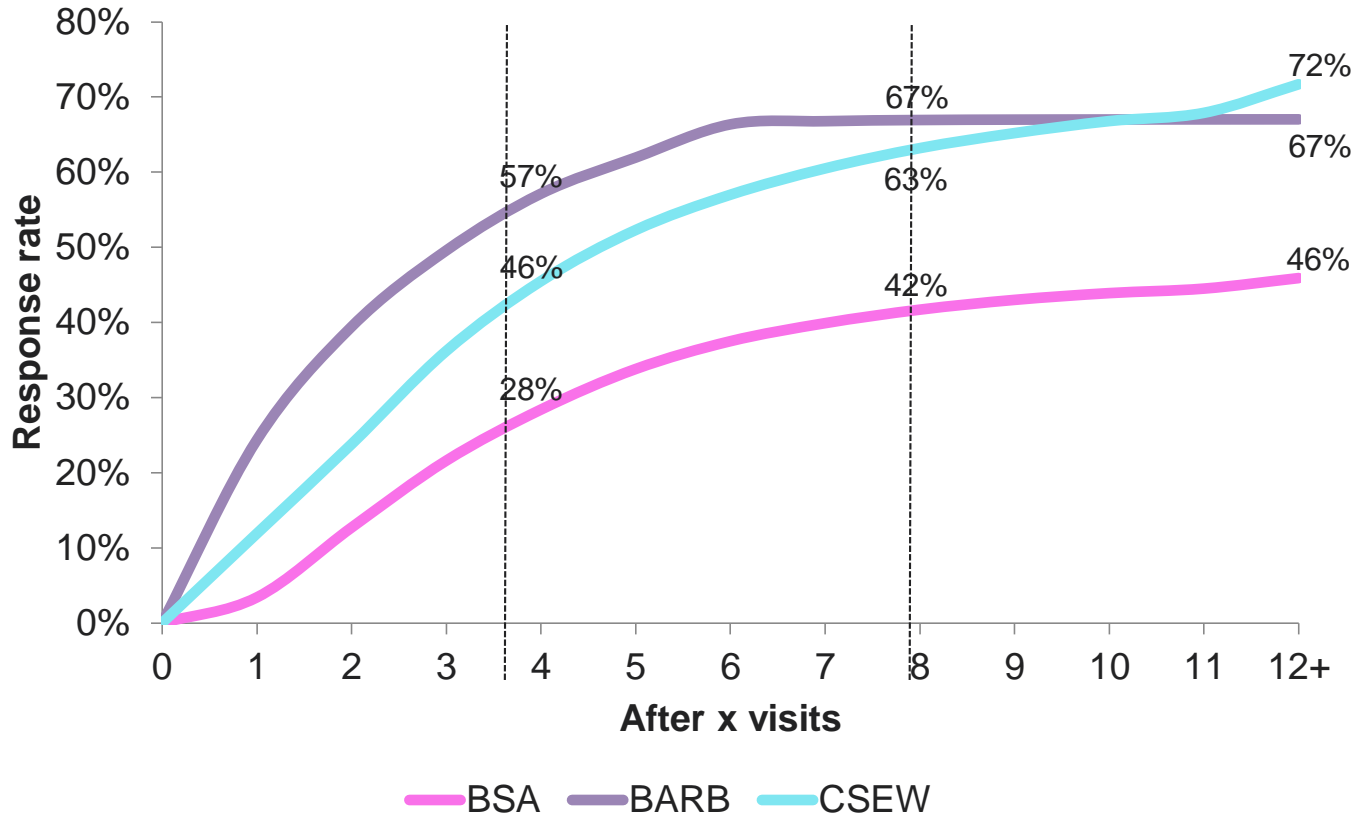
	2008/9	2015/16	% increase	Extra calls per year
BSA (2008-2016)	4.7	5.2	11%	c. 4,000
BARB (2009-2015)	3.9	4.8	23%	c. 72,000
CSEW (2008-2016)	4.1	5.2	27%	c. 55,000

INCREASING EFFORT TO MAINTAIN INTERVIEWER PANELS

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



IS IT WORTH THE EFFORT (AND COST) TO MAINTAIN RESPONSE?



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Response rates and relationship with survey error



RESPONSE RATE AND NON-RESPONSE BIAS

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:

US: Groves and Peytcheva (2008): meta-analysis of studies of absolute NR bias

UK: Sturgis, et al (2016) – relative NR bias and FW effort in 541 non-demographic variables in six surveys

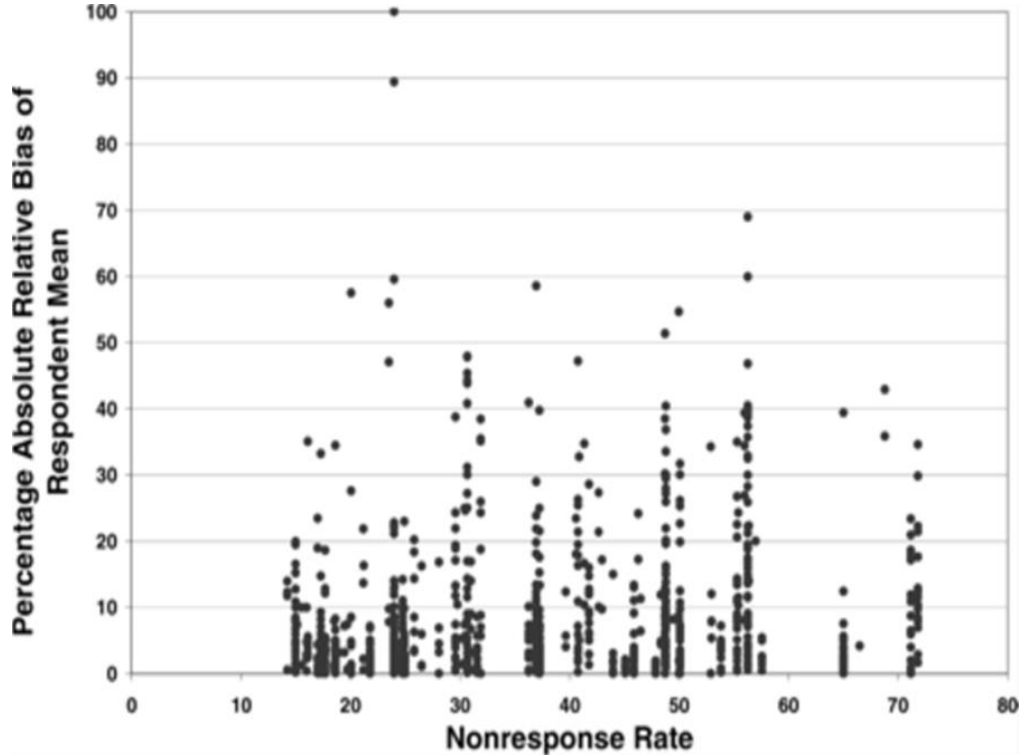
GROVES AND PEYTCHEVA (2008)

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



STURGIS, WILLIAMS & BRUNTON-SMITH (2016, UK)

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%)

STURGIS, WILLIAMS & BRUNTON-SMITH (2016, UK)

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

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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

HOW MUCH SHOULD WE WORRY ABOUT DECLINING RESPONSE RATES?

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

OVERALL CONCLUSIONS

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