

# GV205

## Measuring Public Opinion

### Asking Sensitive Questions

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# Overview

- YouGov Office Trip Feedback
- Sensitive Items:
  - YouGov Data
  - A Definition
- Solutions:
  - Survey Mode
  - Indirect Approaches:
    - List Experiments
    - Random Response Techniques
    - Endorsement Experiments



# YouGov Office Trip: Feedback

- Students who attended found it useful
- We'd like more students to be able to attend next year
- So:
  - If you signed up but couldn't make it, was there anything we could have done to make it easier for you to attend?
  - If you didn't sign up, was there anything we could have done to make it more likely that you would have?



# Sensitive Items: YouGov Data

- In what order, from highest to lowest, do you think the following three variables are ranked in terms of the proportion of respondents who do not give a substantive answer?
  - Sexuality
  - Income
  - Education



# Sensitive Items: Education

Education Level	Percentage
No formal qualification	5%
Lower than GCSE	11%
GCSE or equivalent	10%
A level or equivalent	15%
Professional qualification below degree	9%
Undergraduate degree	23%
Postgraduate degree	11%
Other technical or professional qualification	12%
Don't know	1%
Prefer not to say	3%



# Sensitive Items: Sexuality

Sexuality	Percentage
Heterosexual	86%
Gay or lesbian	4%
Bisexual	4%
Other	1%
Prefer not to say	5%

# Sensitive Items: Income

Gross Personal Income	Percentage
£9,999 or under per year	15%
£10,000 to £19,999 per year	20%
£20,000 to £29,999 per year	18%
£30,000 to £39,999 per year	11%
£40,000 to £49,999 per year	6%
£50,000 or over per year	8%
Don't know	3%
Prefer not to answer	18%



# Sensitive Items: YouGov Data

- Does the ranking of the items surprise you?
- What do you think could explain refusals in each case?





# Sensitive Items: A Definition:

‘A question is sensitive if it raises concerns about disapproval or other consequences (such as legal sanctions) for reporting truthfully or if the question itself is seen as an invasion of privacy.’

‘the very persons with the most sensitive information to report may be the least likely to report it.’

Tourangeau and Smith, p. 276



# Sensitive Items: Solutions

- Question design
- Survey mode
- Indirect approaches:
  - List experiments
  - Random response techniques
    - Forced response designs
    - Mirrored question designs
    - Disguised response designs
    - Unrelated question designs
  - Endorsement experiments



# Solutions: Question Design

- Reassure respondents of their anonymity
- Do not place sensitive questions at the beginning of the survey (or the end, if you want to recontact respondents)
- Make respondents feel comfortable, for instance:
  - ‘In talking to people about elections, we find that a lot of people were not able to vote because they weren't registered, they were sick, or they just didn't have the time. How about you? Did you vote in the election this November?’
- See also Rehm, Greenfield, Walsh, Xie, Robson, and Single (1999)



# Solutions: Survey Mode

	ACASI		CAPI		CASI		$\chi^2_2$ ( <i>p</i> )
	Percent	<i>n</i>	Percent	<i>n</i>	Percent	<i>n</i>	
Marijuana:							
Lifetime	66.3	89	44.8	105	58.0	112	9.39 (<.01)
Past year	26.1	92	16.2	105	16.1	112	4.15 (.13)
Past month	17.4	92	10.5	105	12.5	112	2.13 (n.s.)
Cocaine:							
Lifetime	20.4	93	11.3	106	11.4	114	4.45 (.11)
Past year	5.4	92	1.9	106	2.6	114	2.19 (n.s.)
Past month	3.3	92	1.9	106	1.8	114	<1 (n.s.)

Tourangeau and  
Smith, p. 299

# Solutions: Survey Mode

‘We believe that the two self-administered modes foster a greater sense of privacy of the collection process and that the two auditory modes make it easier for respondents to understand the questions and to complete the questionnaires.’

Tourangeau and Smith, p. 301



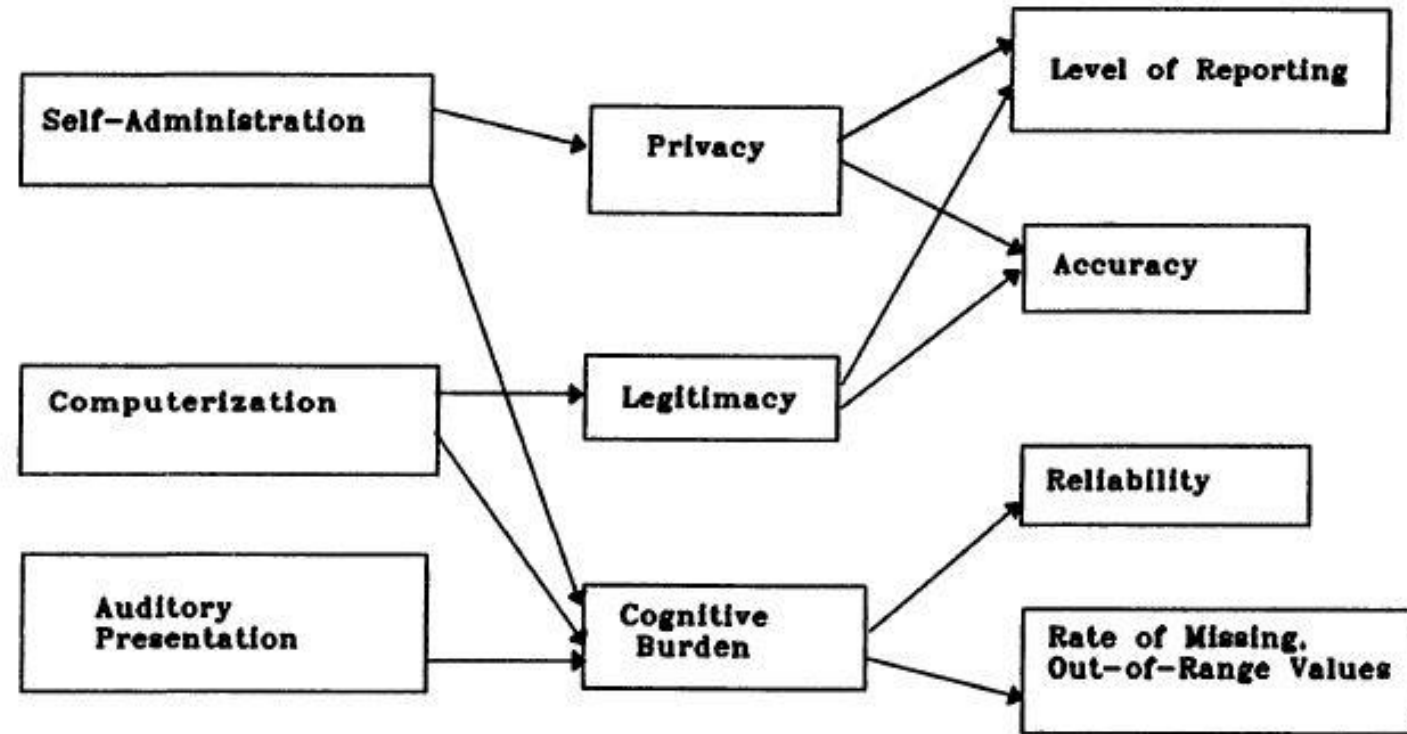
# Solutions: Survey Mode

‘It is also possible that, by letting the respondent interact directly with the computer, ACASI and CASI help convince respondents of the legitimacy and scientific value of the study.’

Tourangeau and Smith, p. 301



# Solutions: Survey Mode



Tourangeau and  
Smith, p. 302

# Solutions: List Experiments

Here is a list of four things that some people have done and some people have not. Please listen to them and then tell me HOW MANY of them you have done in the past two years. Do not tell me which you have and have not done. Just tell me how many:

- Discussed politics with family or friends;
  - Cast a ballot for Governor Phil Bryant;
  - Paid dues to a union;
  - Given money to a Tea Party candidate or organization.
- Discussed politics with family or friends;
  - Cast a ballot for Governor Phil Bryant;
  - Paid dues to a union;
  - Given money to a Tea Party candidate or organization;
  - Voted 'YES' on the 'Personhood' Initiative on the November 2011 Mississippi General Election ballot.

How many of these things have you done in the past two years?



# Solutions: List Experiments

- Avoid ceiling effects by:
  - Not including too many high-incidence items on the list
  - Also not including too many low-incidence items on the list
  - Including negatively correlated items on the list
- Consider double list experiments
- See Glynn (2013)



# Solutions: Random Response Techniques

To answer this question, you will need a coin. Once you have found one, please toss the coin two times and note the results of those tosses (heads or tails) one after the other on a sheet of paper. Do not reveal to me whether your coin lands on heads or tails. After you have recorded the results of your two coin tosses, just tell me you are ready, and we will begin. First, we will practice. To ensure that your answer is confidential and known only to you, please answer 'yes' if either your first coin toss came up heads or you voted in the November 2011 Mississippi General Election, otherwise answer 'no'.

- Yes / No / Don't know / Refused

Now, please answer 'yes' if either your second coin toss came up heads or you voted 'YES' on the 'Personhood' Initiative, which appeared on the November 2011 Mississippi General Election ballot.

- Yes / No / Don't know / Refused

# Solutions: Random Response Techniques

- Forced response designs:
  - As outlined on the previous slide
- Mirrored question designs:
  - Randomise the sensitive item with its inverse
- Disguised response designs:
  - Provide card decks with set colour proportions to avoid 'yes' and 'no' answers
- Unrelated question designs:
  - Randomise the sensitive item with an unrelated non-sensitive item
- See Blair, Imai, and Zhou (2015)



# Solutions: Endorsement Experiments

We'd like to get your overall opinion of some people in the news. As I read each name, please say if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavourable opinion of each person.

Phil Bryant, Governor of Mississippi?

- Very favorable
- Somewhat favorable
- Don't know/no opinion
- Somewhat unfavorable
- Very unfavorable
- Refused

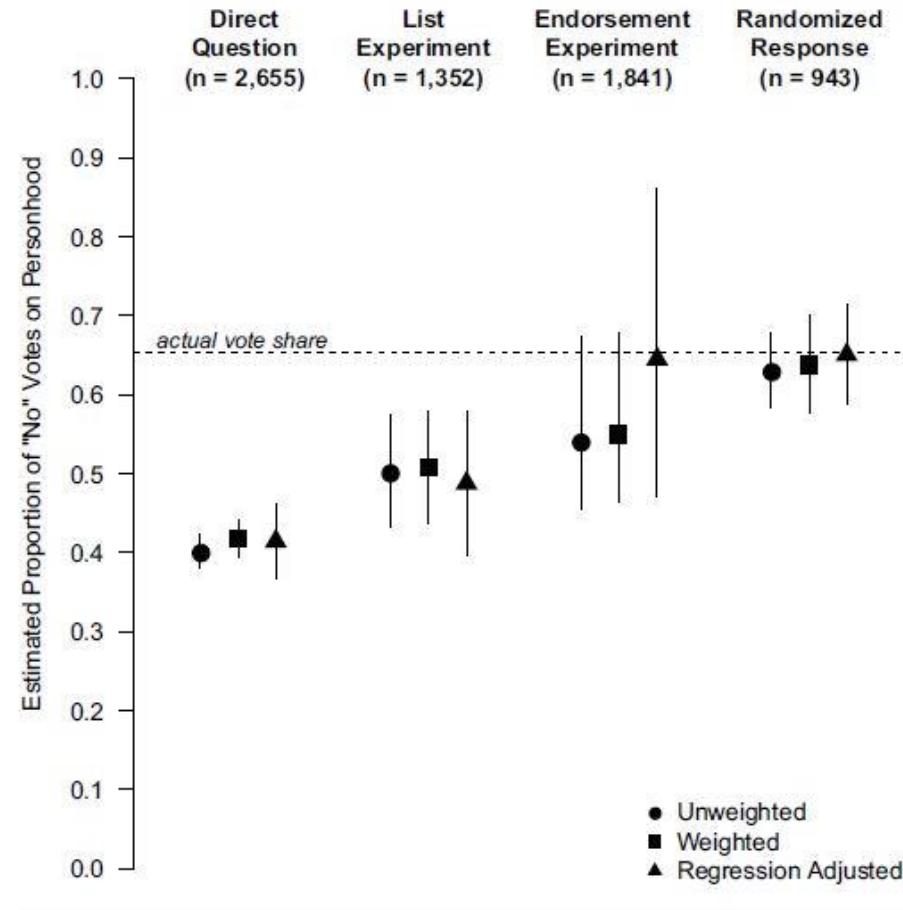
We'd like to get your overall opinion of some people in the news. As I read each name, please say if you have a very favorable, somewhat favorable, somewhat unfavorable, or very unfavourable opinion of each person.

Phil Bryant, Governor of Mississippi, who campaigned in favor of the 'Personhood' Initiative on the 2011 Mississippi General Election ballot? Very favorable

- Somewhat favorable
- Don't know/no opinion
- Somewhat unfavorable
- Very unfavorable
- Refused



# Solutions: Indirect Approaches



Rosenfeld et al., p. 794

# Solutions: Indirect Approaches

**TABLE 2** Comparison of Four Common Survey Methods for Eliciting Truthful Responses to Sensitive Questions

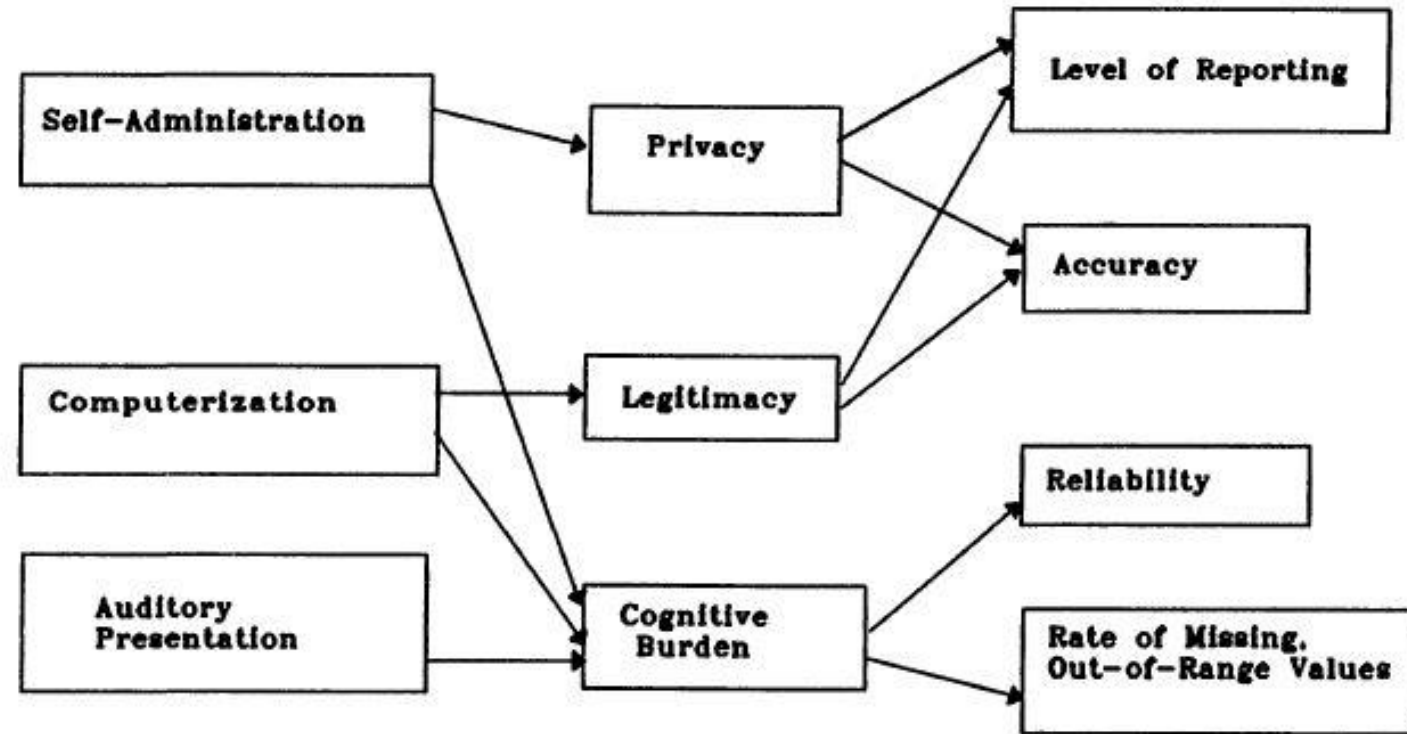
	Direct Questioning	List Experiment	Endorsement Experiment	Randomized Response
Nonresponse	most	minimal	minimal	some
Bias	most	some	minimal	least
Variance	least	some	most	minimal
Privacy	none	some	most	most
Cognitive difficulty	least	some	minimal	most

Rosenfeld et al., p. 799

# Solutions: Indirect Approaches

I have two stacks of cards and a box behind in which I place the cards. [GIVE THE BOX TO THE RESPONDENT AND LOOK AT IT TOGETHER.] In the box, you find a card on which it is written what the stack means: the right-hand stack is the 'yes' stack, and the left-hand stack is the 'no' stack. [LET INTERVIEWEE LOOK AND GIVE DIRECTIONS WITH THE NEXT EXPLANATION.] In the 'yes' stack [POINT TO THE RIGHT-HAND STACK] there are more red cards than in the 'no' stack [POINT TO THE LEFT-HAND STACK, RESPONDENT MAY CHECK]. If you want, you may shuffle the two stacks [SEPARATELY]. Now, please take from each stack an arbitrary card. You may take the card on top or from within the stack. [TAKE A CARD FROM EACH STACK] Nobody but you can see the colors of your cards; when you mention a card color, we do not know the stack from which you took the card. Thus, your privacy is guaranteed: your answer will always remain a secret.

# Solutions: Survey Mode



Tourangeau and  
Smith, p. 302