

Day 3 - Writing Clear Questions and Getting Honest Answers

McCourt School Enhance and Advance Summer Workshop

“A Critical Look at Political Polling”

Professor Jonathan Ladd

*General Guidelines for
Question Writing*

Specific questions are better than general ones

Use forced choice questions, not agree-disagree statements

Omit the middle alternative (unless you want people to use it) and measure intensity

Avoid Double-Barreled Questions

“Do you think the police and the courts are doing an excellent, good, fair, or poor job?”

“Do you think women and children should be given the first available flu shots?”

Words vs number scales

- words have higher reliability

Number of response categories

- reliability peaks at 7-9 categories
- Varies verbal vs reading
- Varies by options (digits, words, phrases, sentences, etc.)

Millers Law

Miller, George A. 1956. "The Magical Number Seven, Plus or Minus Two: Some Limits on Our Capacity for Processing Information." *Psychological Review* 63 (2): 81–97.

Offering a “Don’t Know” Option

Initially thought to increase reliability by filtering out more “nonattitudes”

Recent evidence finds no relation between reliability and “don’t know” option

Be simple and clear

Don't overwrite

A common rule of thumb is to write questions at an 8th grade reading level and avoid all of your topic's jargon.

“in straightforward language, not chatty, overfamiliar, or cast in some subculture’s slang”

– Converse and Pressler (1981) *Survey Questions: Handcrafting the Standardized Questionnaire*.

**Standard spoken English, not
necessarily written English:**

**“Physical fitness is an idea the time
of which has come”**

principal vs. main

intelligible vs. clear/understandable

Intuitive vs. feeling

Usually, shorter is better.

Avoid Filler Phrases.

“The next question is about medicines during the past 4 weeks. We want to ask you about this. What medicines, if any, did you take or use during the past 4 weeks?”

“What medicines, if any, did you take or use during the past 4 weeks?”

Summary judgment questions that are still clear

“In general, would you say that crime in your neighborhood is very serious, somewhat serious, not too serious, or not at all serious?”

“Overall, how satisfied are you with your academic advisor at Georgetown?”

**Don't assume too much
knowledge of a topic**

Avoid Mathematical Concepts

“Compared to a year ago, do you feel the prices of most things you buy are going up faster than they did then, going up as fast, going up slower, or not going up at all?”

Avoid Mathematical Concepts

“What proportion of your evening viewing time do you spend watching news programs?”

William Belson found that only 14-53% of respondents tend to correctly defined proportion as part, fraction, or percentage.

Avoid Mathematical Concepts

“In the past week, since Sunday, how many hours have you watched television in the evening?”

“Did you spend any of that time watching news programs?”

“[If yes] How many hours did you watch news programs?”

Getting Honest Answers

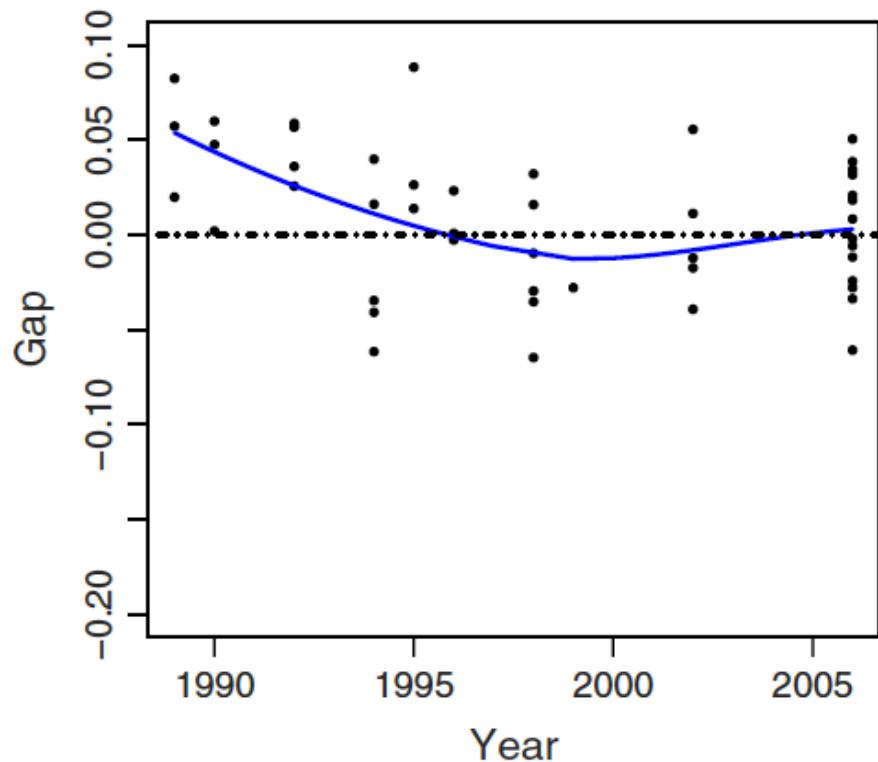
Wilder/Bradley Effect?

- Douglas Wilder elected VA Governor in 1989 by less than $\frac{1}{2}$ % point
- Tom Bradley lost the CA governors election in 1982

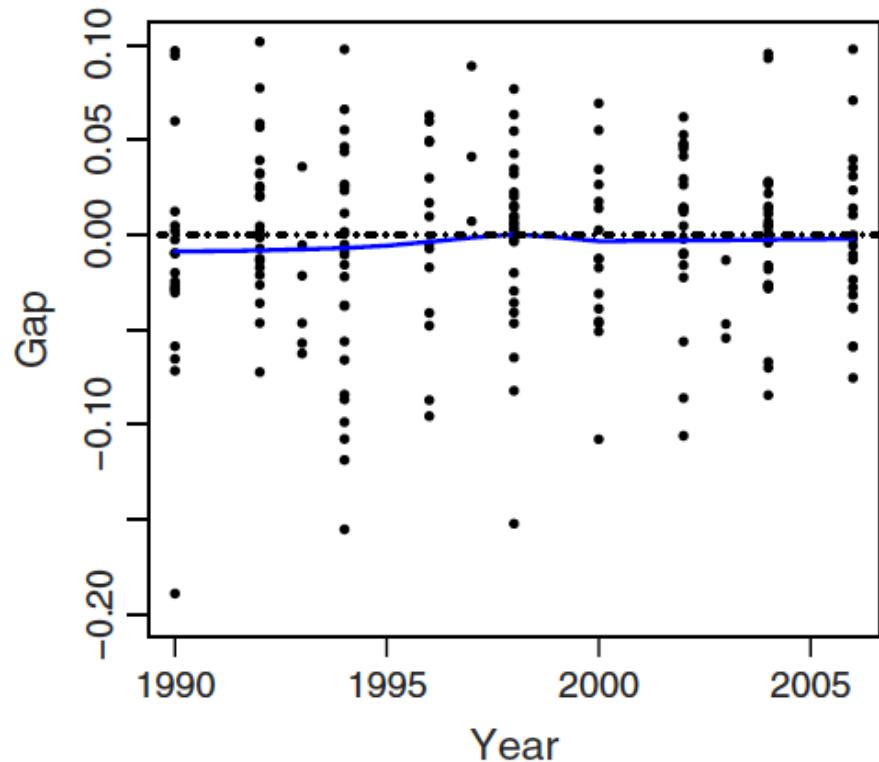
Whitman Effect?

- Christine Whitman narrowly elected New Jersey Governor in 1993 by 1%

Black Candidates



Female Candidates



Difference between average of average of 3 last independent polls and election result in Senate and Governors races 1989-2006, excluding when 2 members of group ran against each other.

Hopkins, Daniel J. 2009. "No Wilder Effect, Never a Whitman Effect: When and Why Polls Mislead about Black and Female Candidates." *Journal of Politics* 71(3):769-781

Detecting Misreporting

Surveys versus Observation

2014 General Social Survey:

- Heterosexual men average 63 sex acts per year, condoms in 23% of those: 1.6 billion heterosexual condom uses
- Heterosexual women average 55 sex acts per year, condoms in 16% of those: 1.1 billion heterosexual condom uses

Nielsen industry 2014 data on condom purchases:

- 600 million condoms per year or less

Surveys versus Observation

2014 General Social Survey:

- 11% of women ages 15-44 say they are sexually active, not currently pregnant and not using contraception.
- 10% should get pregnant every month, slightly more than 1% of population.

Only 1 in 113 of age 15-44 female population gets pregnant each year

Seth Stephens-Davidowitz. 2015. “Searching for Sex.” *New York Times*. January 25. p. SR1.

<http://www.nytimes.com/2015/01/25/opinion/sunday/seth-stephens-davidowitz-searching-for-sex.html>

Identification as Lesbian, Gay or Bisexual (LGB) among American Adults Aged 18-44, 2002-2015

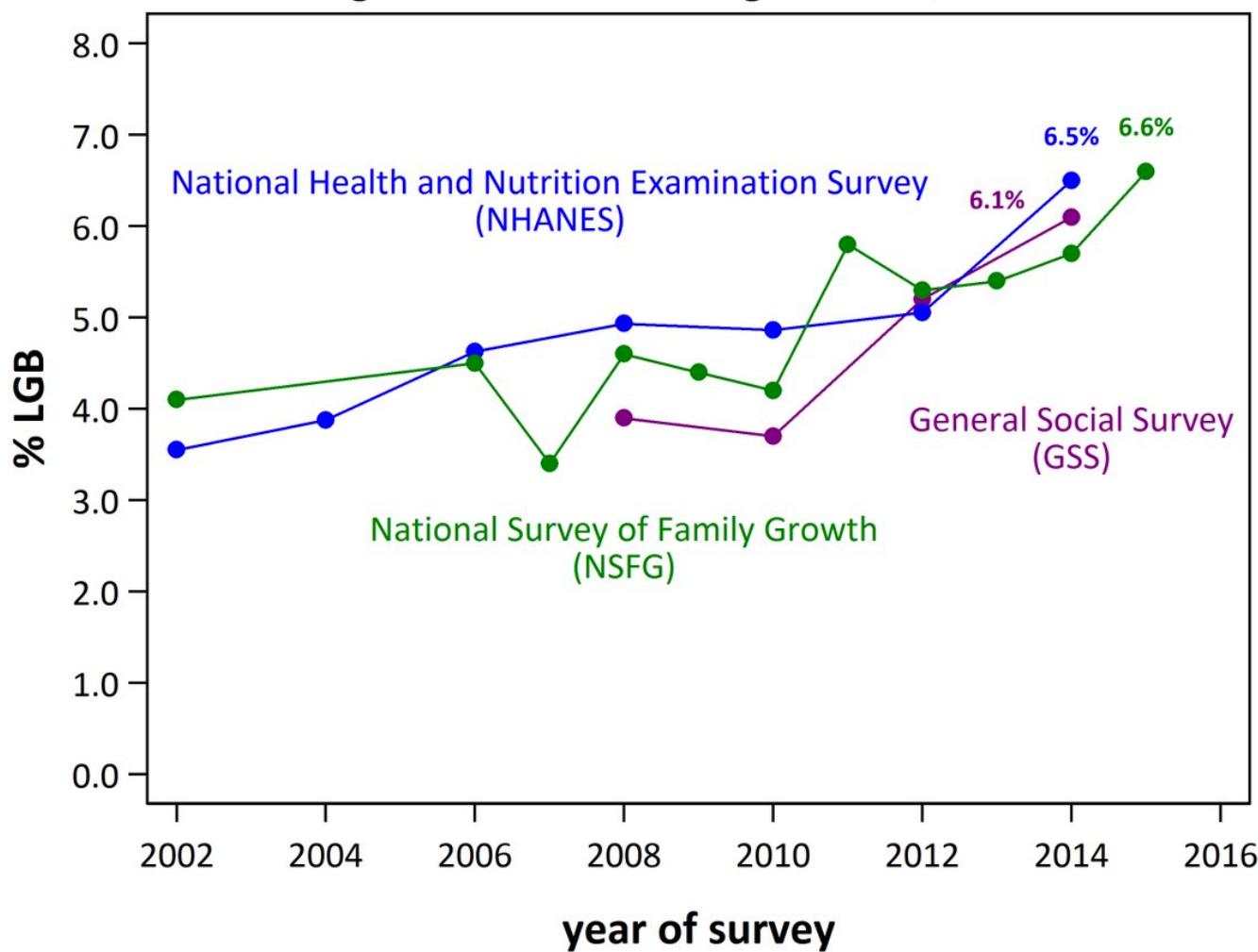


Figure by Patrick J. Egan.

*Less Personal Modes Reduce
Social Pressure*

“During the last 12 months, that is, since August/September 1993, how many men (if any) have you had intercourse with? Please count every partner, even those you only had sex with once.”

Roger Tourangeau and Tom W. Smith. 1996. “Asking Sensitive Questions: The Impact of Data Collection Mode, Question Format, and Question Context.” *Public Opinion Quarterly* (1994-5 data)

- Personal interviewing (CAPI)
- Computer written (CASI)
- Computer with audio (ACASI)

Table 5. Ratios Comparing Levels of Reporting by Mode of Data Collection

	ACASI vs. CAPI	CASI vs. CAPI
% reporting anal sex	4.21	2.04
% reporting oral sex	1.46	1.25
% reporting marijuana use:		
Past month	1.66	1.19
Past year	1.61	.99
Lifetime	1.48	1.29
% reporting cocaine use:		
Past month	1.74	.95
Past year	2.84	1.37
Lifetime	1.81	1.01
Average number of sex partners (both sexes):		
Past year	1.06	.87
Past 5 years	1.31	.87
Lifetime	1.28	1.04
Average number of sex partners (males):		
Past year	.75	.54
Past 5 years	1.00	.70
Lifetime	1.01	.90
Average number of sex partners (females):		
Past year	1.64	1.48
Past 5 years	1.88	1.16
Lifetime	1.66	1.24

CAPI – *Personal interviewing*

CASI – *Computer written*

ACASI – *Computer with audio*

*Loading Questions
Toward the Sensitive
Response*

*Normalize the Sensitive
Behavior*

Everybody does it: “Even the calmest parents get mad at their children sometimes. Did your children do anything in the past week to make you angry?”

Assume the behavior: “How many times in the past week did your children do something to make you angry?”

Authorities recommend it: “Many psychologists believe it is important for parents to express their pent up frustrations. Did your children do anything in the past week to make you angry?”

Reasons for doing it: “Parents become angry because they’re tired or distracted or when their children are unusually naughty. Did your children do anything in the past week to make you angry?”

American National Election Studies 2008 and After Vote Turnout Question

In asking people about elections, we often find that a lot of people were not able to vote because they weren't registered, they were sick, they didn't have time, or something else happened to prevent them from voting. And sometimes, people who usually vote or who planned to vote forget that something unusual happened on Election Day one year that prevented them from voting that time. So please think carefully for a minute about the recent elections, and other past elections in which you may have voted, and answer the following questions about your voting behavior.

American National Election Studies 2008

During the past 6 years, did you **USUALLY VOTE** in national, state, and local elections, or did you **USUALLY NOT VOTE**?

- 1) Usually voted
- 2) Usually did not vote

During the months leading up to the elections that were held on November 4th, did you ever plan to vote, or didn't you plan to do that?

- 1) Did plan to vote
- 2) Did not plan to vote

American National Election Studies 2008

[If not sure whether voted] If you had to guess, would you say that you probably did vote in the elections, or probably did not vote in the elections?

- 1) Probably voted
- 2) Probably did not vote

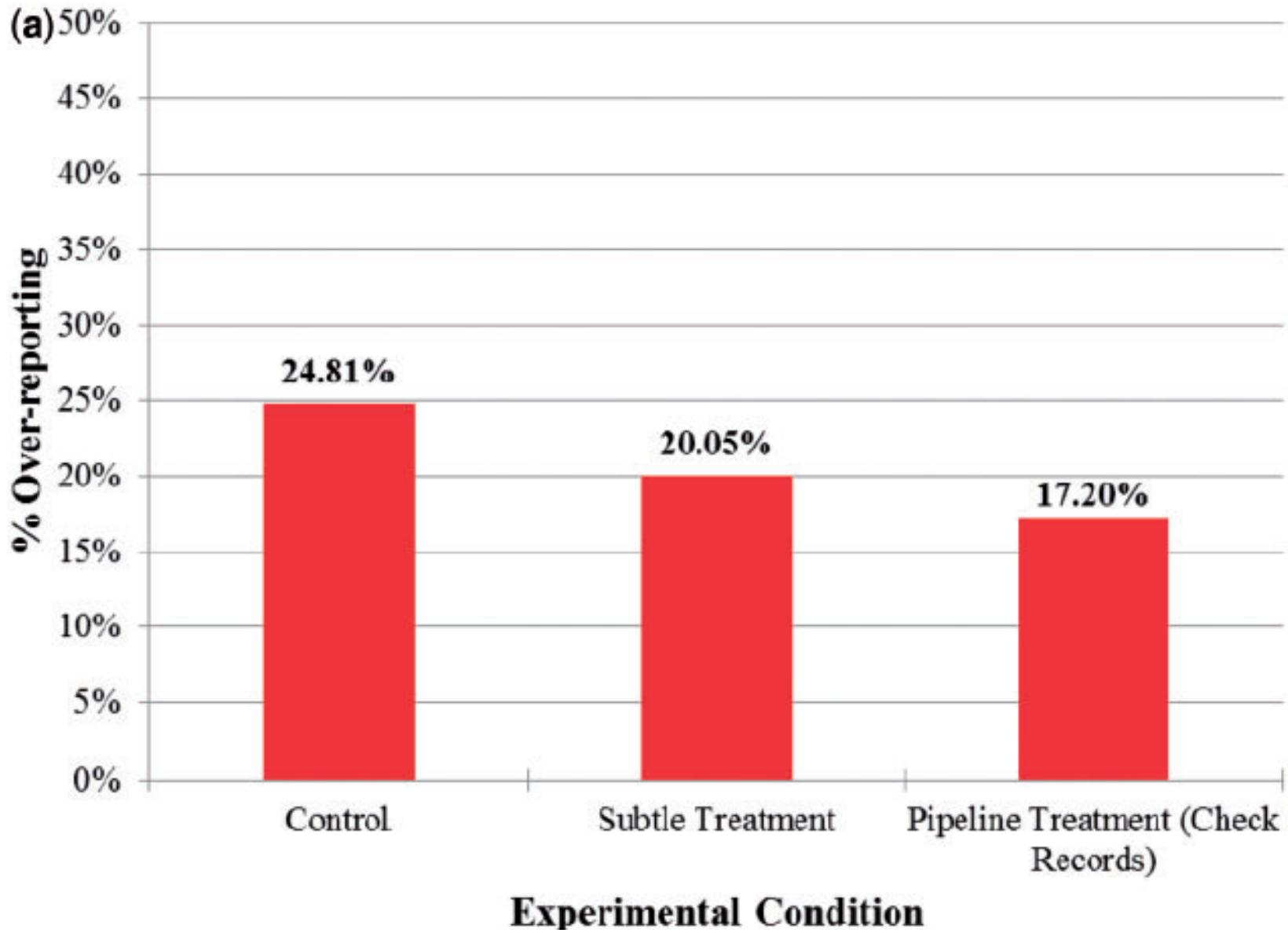
Bogus Pipeline

Control: In talking to people about elections, we often 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 time. Which of the following statements best describes you?

Subtle Turnout Question: In talking to people about elections, we often 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 time. We also sometimes find that people who say they voted actually did not vote. Which of the following statements best describes you?

- 1) I did not vote**
- 2) I thought about voting this time but didn't**
- 3) I usually vote but didn't this time**
- 4) I am sure I voted.**

Actual Pipeline Turnout Question: In talking to people about elections, we often 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 time. By looking at public records kept by election officials, we can get an accurate report of who actually voted in November, and in previous elections. Of course, these public records do not say who you voted for. Part of our study will involve checking these records against the survey reports. Which of the following statements best describes you?



% of nonvoters reporting voting

List Experiments

1991 Survey: Now I'm going to read you three (four) things that sometimes make people angry or upset. After I read all three (four), just tell me how many of them upset you. I don't want to know which ones, just how many

- 1) The federal government increasing the tax on gasoline.
- 2) Professional athletes getting million-dollar salaries.
- 3) Large corporations polluting the environment.
- 4) A black family moving in next door.

Difference off means between the
“treated” and the “untreated” groups =
proportion with the undesirable attribute

TABLE 1

ESTIMATED MEAN LEVEL OF ANGER OVER A BLACK FAMILY MOVING IN
NEXT DOOR, BY REGION (WHITES ONLY)

Condition	Non-South	South
Baseline	2.28 (.77) <i>n</i> = 425	1.95 (.80) <i>n</i> = 139
Black family	2.24 (.95) <i>n</i> = 461	2.37 (1.0) <i>n</i> = 136
Estimated % angry	0	42***

Note: Entries are means; standard deviations are in parentheses.

*** $p < .001$ for regional difference in estimated percent angry (one-tailed test).

Tips for list experiments

(from Adam N. Glynn. “What Can We Learn with Statistical Truth Serum?: Design and Analysis of the List Experiment.” *Public Opinion Quarterly*, 2013.)

Avoid ceiling or floor effects that compromise anonymity:

- Need Negative correlations between the base items
- Base items with some variation in responses
 - Avoid many high prevalence non-sensitive items or many low prevalence non-sensitive items
- Avoid short lists

List Experiment

1991 Survey: Now I'm going to read you three (four) things that sometimes make people angry or upset. After I read all three (four), just tell me how many of them upset you. I don't want to know which ones, just how many

- 1) The federal government increasing the tax on gasoline.
- 2) Professional athletes getting million-dollar salaries.
- 3) Large corporations polluting the environment.
- 4) Black leaders asking for affirmative action

TABLE 2

ESTIMATED MEAN LEVEL OF ANGER OVER AFFIRMATIVE ACTION, BY REGION (WHITES ONLY)

Condition	Non-South	South
Baseline	2.28 (.77) <i>n</i> = 425	1.95 (.80) <i>n</i> = 139
Affirmative Action	2.69 (1.0) <i>n</i> = 409	2.93 (1.07) <i>n</i> = 141
Estimated % angry	41	98***

Note: Entries are means; standard deviations are in parentheses.

*** $p < .001$ for regional difference in estimated percent angry (one-tailed test).

2008-9 ANES Panel Study: Below are four things. Please tell us how many of them you would dislike. We do not need to know which ones you would dislike, just how many.

- 1) Listening to music
- 2) Making it legal for two men to marry
- 3) Teaching intelligent design along with evolution in public schools
- 4) Getting a phone call from a telemarketer
- 5) A black person becoming president (randomly added)

Table 1. Estimated Mean Level of Dislike for a Black President of the United States among White Respondents on the 2008–2009 ANES Panel Study List Experiment (standard errors in parentheses)

	Treatment list (four items and black president item)	Baseline list (four items)	Treatment-minus-baseline difference
Estimates	2.234 (0.044)	2.230 (0.038)	0.005 (0.058)
<i>n</i>	431	405	

NOTE.—Numbers were rounded after calculations were made.

SOURCE.—2008–2009 American National Election Studies Panel Study

Summary of methods for improving honesty:

- 1) Less personal interview modes**
- 2) Loading questions toward the sensitive behavior / normalizing the sensitive behavior**
- 3) Bogus pipeline**
- 4) List experiments**