

# Design and Analysis of Sample Surveys

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Class 7a: Survey interviewing

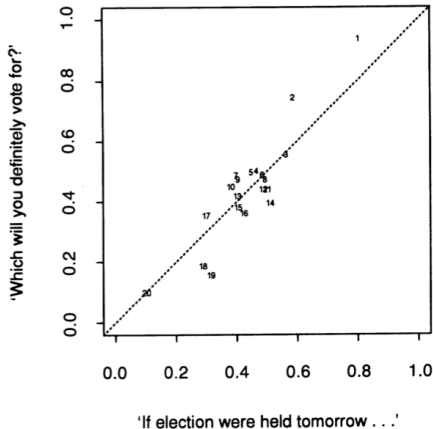
# Chapters 7–9 of Groves et al.

- ▶ Questions and answers in surveys
- ▶ Evaluating survey questions
- ▶ Survey interviewing

# Examples of interest to you

- ▶ Consider a survey question of interest and different ways of asking it
- ▶ Discuss in pairs

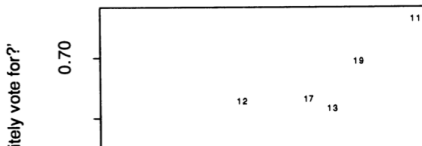
# Bush support by question wording

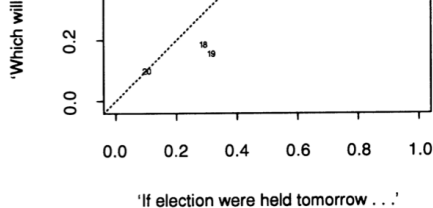


## Key

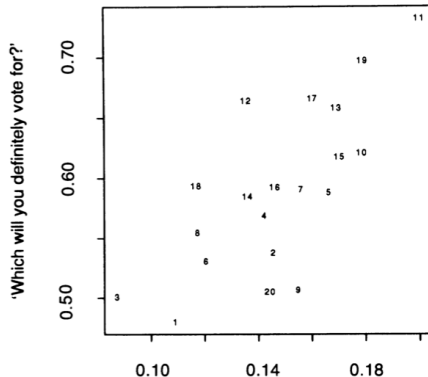
1. Republicans
2. Conservatives
3. Over \$50,000/year
4. Whites
5. \$25-50,000/year
6. College education
7. Non-South
8. Men
9. Over 30 years old
10. Women
11. Independents
12. Under 30 years old
13. No college education
14. South
15. Moderates
16. \$15-20,000/year
17. Under \$15,000/year
18. Liberals
19. Non-whites
20. Democrats

## Proportion undecided by question wording





Proportion undecided by question wording

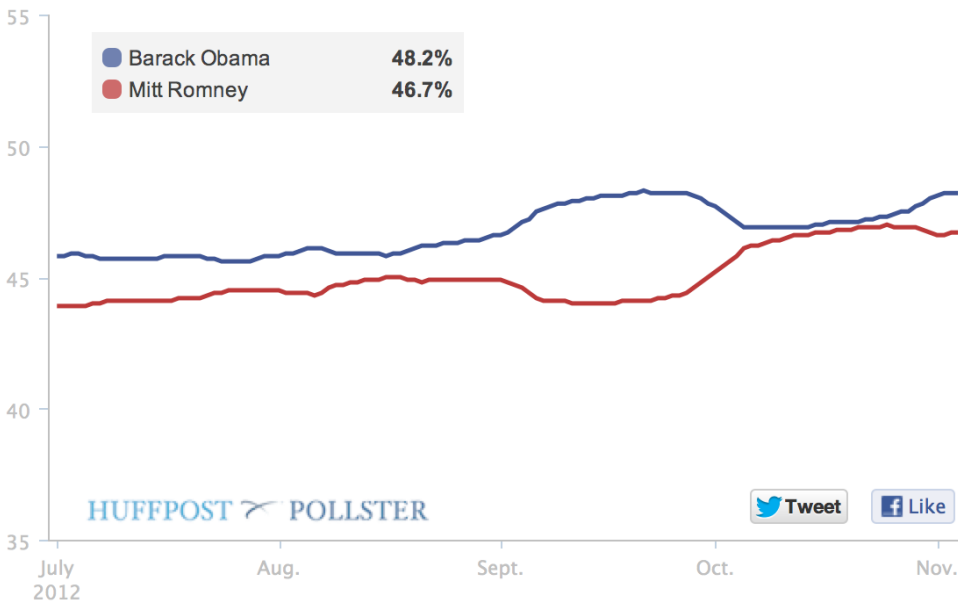


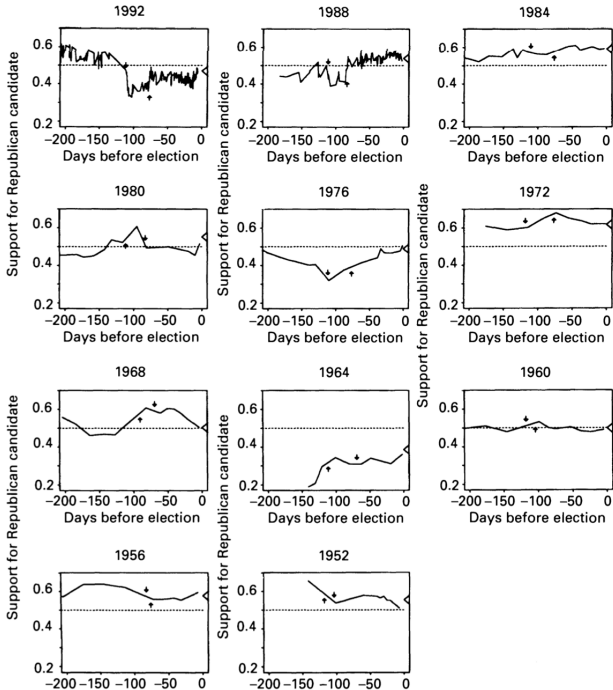
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# Asking about political attitudes

- ▶ Do people answer the survey?
- ▶ Nonresponse
- ▶ Leaners
- ▶ How to think about poll swings?

# Pre-election polls in 2012







# How many gays are in the military?

- ▶ The (almost) direct approach: Ask troops, “Do you currently serve with a male or female Service member you believe to be homosexual?”
- ▶ Gary Gates (UCLA) used conditional probability:
  - ▶ Combine an estimate of the percentage of gays in the population (easy enough to estimate from national surveys) with an estimate of the probability that someone is in the military given that he or she is gay (as estimated based on the proportion of individuals in same-sex unmarried partner couples who report military service).
  - ▶ Gates estimates that 1.5% of men and 6.2% of women in the military are gay or bisexual

# Measuring domestic violence

Felipe and Susanne:

- ▶ When it comes to hard numbers, there is information on the number of people murdered by their spouses each year and things like that, but a broader definition of domestic violence is obviously harder to capture using official statistics.
- ▶ We've looked into three surveys that are often cited in this context: the National Crime Victimization Survey, the National Violence Against Women Survey, and the Commonwealth Survey of Women's Health.
- ▶ All three just ask women in a straightforward manner if they have been victims of various kind of violence. To account for the potentially uncomfortable situation, the National Violence Against Women Survey only uses female interviewers.

# Measuring domestic violence

Felipe and Susanne:

- ▶ We did not come across an attempt to address underreporting in a clever way similar to what we saw in class regarding gay military members, even though there seems to be a lot of discussion around reliability and possible under-/overreporting. The studies here report margins of error between 1–3 million which seems to underline the size of the problem.
- ▶ The three surveys use different definitions of domestic violence. Most include physical violence only; others also emotional abuse and coercion. Also, questions mostly ask “have you ever” and thereby do not take into account intensity and frequency of domestic violence.
- ▶ The current discussion in the research community seems to revolve more around properly including all kinds of coercion and including the intensity of the threat; not so much to address issues of underreporting; see, for example, <https://www.ncjrs.gov/pdffiles1/nij/grants/214438.pdf>

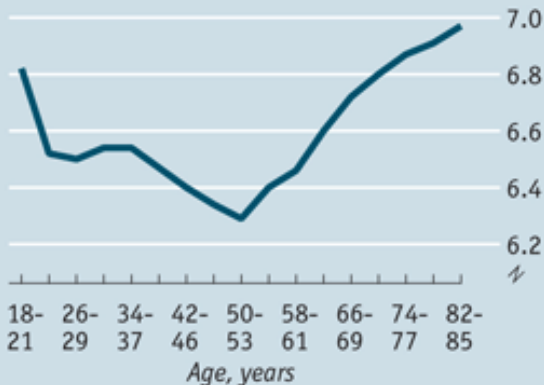
# Even the U.S. Census ...

- ▶ Undercount
- ▶ Race and ethnicity
- ▶ National origin
- ▶ Households: Gary Gates estimates that over 40 percent of same-sex “unmarried partner” couples in the 2000 U.S. Decennial Census are likely misclassified different-sex couples: a seemingly minor error rate of 2% in the general population is enough to completely contaminate the valid responses from the small subgroup

# Measurement: Age and happiness

## The U-bend

Self-reported well-being, on a scale of 1-10



Source: PNAS paper: "A snapshot of the age distribution of psychological well-being in the United States" by Arthur Stone

# Measurement: Age and happiness

**Average happiness as a function of age,  
from General Social Survey**

