SREE Final Presentation

-Public Polls on Perceptions of Higher Education-

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Meeting Agenda

1. Background
2. General findings on public perceptions of higher ed.
3. Three common polling methods
4. Three major methodological concerns
5. Best practices
6. Recommendation for survey users
7. The best polling method

1. Background

- Media and public polls have increasingly measured the public perceptions of American higher ed.
- The public questions the legitimacy of public polls
- Polling methods have been diversified.

→ Survey users must understand diverse polling methods and the best ways to use them for their decision-making.

2. Americans' perception of higher ed.

- Polls repeatedly reported **a low and decreasing** confidence in higher ed.
  - 36% of U.S. adults expressed confidence in 2023, dropping from 57% in 2015 (Gallup, 2023).

- Polls repeatedly reported the **political divide** in perceptions of higher ed.
  - Higher ed. leading in a positive direction: 78% of Democrats vs 41% of Republicans (New America, 2023)

- Polls predominantly surveyed the perceived **private economic benefits** and their cost-benefit implication.
  - Many American valued the economic benefits of higher education, but questioned if it was worth the costs.

3. Three polling methods

1. Telephone survey by random digit dialing (RDD)

Random sampling: Phone numbers were randomly sampled after selecting area codes and prefixes based on a geographical area (Gallup and Pew)

2. Probability-based panels

Random sampling: National survey panels formed by randomly selecting samples from a population database. The sampled take multiple surveys over time. A typical sampling method is address-based sampling.

3. Online opt-in polls

Non-random sample: Respondents are gathered from diverse online sources. They use a statistical adjustment (weighting by demographics) to claim the representativeness.

Mapping concerns by TSE framework

Table 4: Methodological strengths and weaknesses of three polls under the Total Survey Error framework

	RDD	Probability-based panels	Online opt-in polls
1. Validity	-**Different constructs across question items (sentiment in higher education varies from 25% to 67%)** -**Different constructs for one item across individuals** -**Higher education is not a single entity (e.g., 4-year universities vs. community college, public vs. private)** -**Unclear types of benefits of higher education (economic vs. non-economic).**		
2. Measurement error	+Interviewer assistance -Interviewer errors	+Interviewer assistance (for telephone interview) +-Conditional effects -Careless answers -Interviewer errors (for telephone interview) -Incentive errors	+No interviewer errors +Experience (for online panel) -Careless answers -Incentive errors
3. Processing error	-Weighting error (dual frame)	-Weighting error	-Weighting error
4. Coverage error	-Overlap of landline and cell phone frames -Moving without changing cell phone numbers -Selection within a household (for landline)	+High coverage -Internet accessibility and skills -Multiple addresses -Selection within a household (multiperson dwellings)	-**Not applicable**
5. Sampling error	-Imprecise estimates for subgroups	-Imprecise estimate for subgroups	-**Not applicable**
6. nonresponse error	-**Extremely low response** (Pew: landline 8.9%. Cell phone: 3.2%).	-**Low response** (NORC: 10-20%) -**Low recruitment** (NORC: initial 6%) -**Panel attrition** (NORC: Annual retention rate 85%)	-**Not applicable**
Cost	High for calling people	Extremely high for making a panel, but moderate for implementing each survey.	Low
Time	Quick	Slow to make a panel by ABS Quick to collect responses	Quick

Note: + and - show the potential strengths to reduce or weaknesses to increase survey errors, respectively.

4. Major methodological concern

4.1. Validity

- There is a wide variation in confidence levels (25-67%) across surveys.

  *"… how much **confidence** you have in higher ed."*
  *"… do you have a **favorable/unfavorable impression** of colleges …"*
  *"Higher education in America **is fine how it is**."*

- Higher Education is not a single entity (e.g., 4 or 2 years. Public or private.)

- Question items are unclear on the benefits of higher ed.
  *"A college education is still the best investment for people who want to get **ahead and succeed**."*

4. Other 2 methodological concerns

4.2. Low response rates in RDD and probability-based panels

RDD: Landline 8.9% and Cellphone 3.2% in a Pew 2019 poll.

Probability-based panels: Final response rate is about 10-20%.
Non-responses occurs in **panel recruitment, panel retention**, and **survey participation.**
Example: NORC's panel
Panel recruitment rate: 34% (initial 6% and follow-up 28%)
Annual panel retention rate: 85%

4.3. Reliability of statistical adjustment in online opt-in polls

These polls claim the representativeness of estimates not based on the design of the sampling frame but on the statistical modeling (e.g., raking adjustment).

5. Best practices for validity issues

Categorize public attitudes as follows:

	General	Specific (entities/levels)
Public confidence/Sentiment	e.g., Public confidence in *higher education*	e.g., Public confidence in *public community colleges*
Benefits of higher ed.	e.g., Public perceptions on private economic benefits of *higher education*	e.g., Public perceptions on private economic benefits of *public 4-year colleges*
Specific issues	e.g., Public opinions of race-based admission decision by *higher education*	e.g., Public opinions of race-based admission decision by *public 4-year colleges*

1. Private economic benefits (e.g., individuals' income and employment)
2. Private non-economic benefits (e.g., health and happiness)
3. Public economic benefits (e.g., economic growth)
4. Public non-economic benefits (e.g., democracy)

5. Best practices for low response rates

A low response does not necessarily signify a non-response bias.
→A non-response bias exists only when the variable of interest is correlated with the probability of responding.

Non-response bias for RDD and probability-based panels can be partly detected as follows:
1. Comparison of the response rates across subgroups
2. Comparison of respondents' characteristics with ones in a benchmark survey

For probability-based panels
3. Comparison of panelists' characteristics from early stages with those from full respondents
4. Comparison of respondents' characteristics before and after the follow-up recruitment

5. Best practices for reliability of statistical adjustment

Sample matching has potential to infer the population estimate.

Sample matching (Rivers, 2007):

Panelists are recruited with convenience.
The target sample is randomly chosen from the benchmark probability-based survey.
Panelists are closely matched to the ones in the target sample according to a large set of variables.

Successful sample matching requires to meet conditions below (Ansolabehere & Schaffner, 2014).

- Use of sample matching based on a target probability-based sample
- Availability of variables in both a panel and the target sample
- Large and diverse sets of panelists to allow close matching
- Use of post-survey weight to account for the remaining unrepresentativeness

→ It needs sufficient time, resources, and expert knowledge.

6. Key recommendations for survey users

1. Clarify the goals and purposes of your study.
2. Check if question items correctly capture the construct.
3. Telephone surveys are not dead despite large amounts of non-responses.
4. Probability-based panels are promising but be cautious of the non-response mechanism.
5. Online opt-in polls are not advisable for inferring population estimates.

7. The best polling method

Probability-based panel with address-based sampling

Advantages
-Broad coverage of households
-Examine the potential non-response bias once the demographic information is collected in the earlier stage
-Choose survey modes (web and telephone) flexibly to increase coverage and response

Things to consider
-Enough time to recruit panelists
-Enough budget to use a high-quality panel
-Extensive checks of the non-response bias
-The newer the panel, the better

Q&A