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Issues in Survey Research Design

Overview

Surveys are Ubiquitous

- Examples

South Carolina Republican Primary: Palmetto Poll

- *Q1. In the primary election for president for whom will you vote?*

» *January 18-19 poll*

- *Mitt Romney* *26 %*
- *Newt Gingrich* *32 %*
- *Rick Santorum* *9%*
- *Ron Paul* *11%*
- *Undecided* *20%*

Methods:

- The final Palmetto Poll was put in the field on Friday, January 13, but on Wednesday, January 18 we recalibrated the process to measure changing dynamics.
- The final numbers of this poll come from polling on just Wednesday (January 18) and Thursday (January 19).
- For this reason our final margin of error is 4.73 for a sample size of 429.
- The sample is of GOP voters, two-thirds of which were chosen for their previous party allegiance, while one-third were general election voters who indicated they planned to vote on Saturday, January 21st.

Current Example: South Carolina Republican Primary

- *Q1. In the primary election for president for whom will you vote?*

	<i>» January 18-19 poll</i>	<i>Results</i>
• <i>Mitt Romney</i>	<i>26 %</i>	<i>27.9%</i>
• <i>Newt Gingrich</i>	<i>32 %</i>	<i>40.4%</i>
• <i>Rick Santorum</i>	<i>9%</i>	<i>17.0%</i>
• <i>Ron Paul</i>	<i>11%</i>	<i>13%</i>
• <i>Undecided</i>	<i>20%</i>	

What is Survey Research?

- Can't anyone put together "a little survey?"

What is Survey Research?

- Systematic, standardized approaches to collecting info. from individuals, households or larger entities through questioning systematically identified samples of individuals
- Approach specifies:
 - What information—standardized instrument
 - From whom— sample/population
 - How—standardized procedures

Standardization

- Data collection method does not taint the information – as close to observation as we can make it
- Same procedures used with everyone—error affects all respondents alike
- Procedures can be replicated with similar results.

What do we mean by the “quality of a survey?”

- A high quality survey has minimized sources of error (using the techniques that have been developed over the last 50 years)

What do we mean by error?

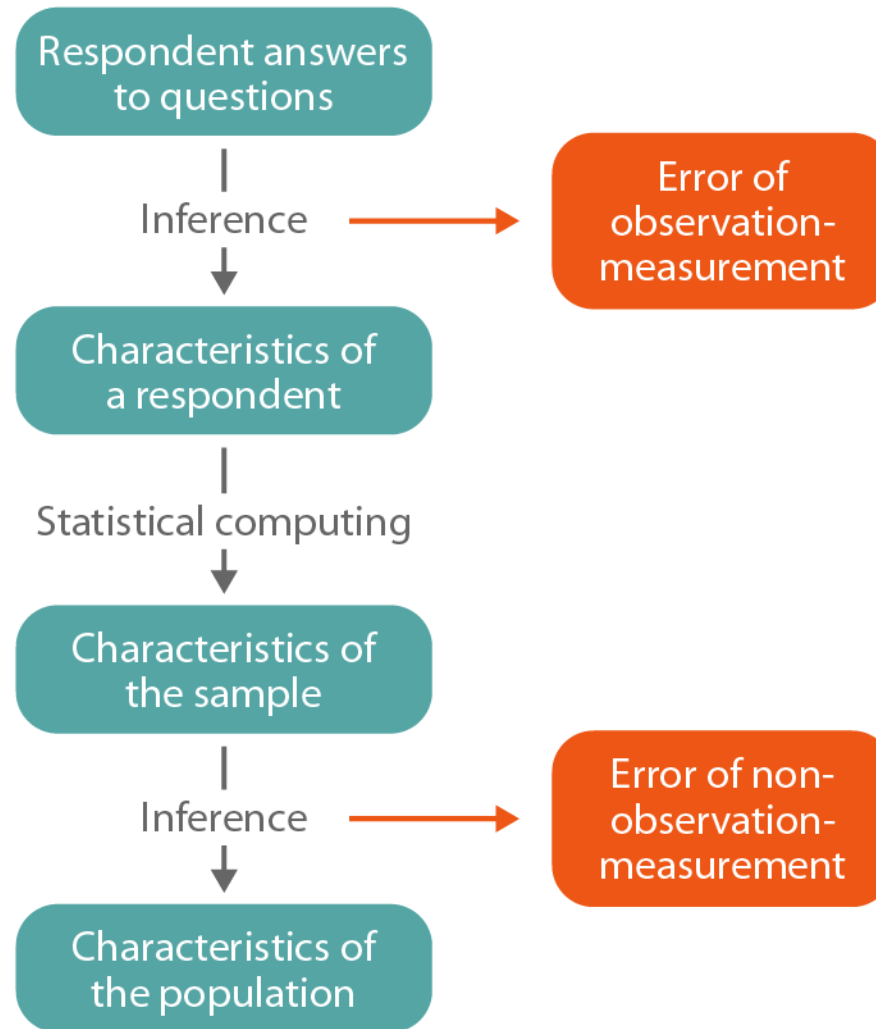
- Not mistakes
- Deviation of results from “true value”
 - Can be systematic --- Bias
 - Can be unstable or random -- Variance

Steps in Research Design



Not as linear or as sequential as this figure suggests

Sources of Error in Surveys



Survey research methods have developed over the last 50 years: Three Eras according to Groves

2011

- **Era of Invention 1930 - 1960**
 - mid 1930s sampling began– first the quota sample (predicted Roosevelt election) and psychologists developing measures of attitudes
 - In the 1940s's the development of the area probability sampling approach.
 - Also the Kinsey Report
 - 1940's Consumer marketing and political polls
 - 1950-Development of national research organizations

- **Era of Expansion 1960 -1990**
 - **60's**
 - **Development of statistical packages,**
 - **increased federal use of surveys,**
 - **examination of research methods-randomized field trials**
 - **70's**
 - **Decrease response rates**
 - **federal support for surveys, increase costs.**
 - **Greater use of telephone RDD—**
 - **Initiation of longitudinal surveys—PSID, NLSY**
 - **80's -90's**
 - **Growth in independent survey firms,**
 - **focus on mass media, corporate –in house survey units-**
 - **computer assisted surveying**
- **Designed Data Supplemented by Organic Data 2000-**
 - **Demise of the telephone survey**
 - **New data sources because of threats to designed surveys;**
 - **Volume of organic data (data bases generated by internet and technologies) can be used eg Google search flu study**
 - **Mixed Mode**