Data Literacy and Voting

Stuit, Martha

http://hdl.handle.net/2027.42/146732
Data Literacy and Voting

Martha Stuit
University of Michigan

Friday, July 15, 2016, 1:15 p.m. - 2:15 p.m.

Image: “Voting United States.jpg” by Tom Arthur, on Wikimedia Commons. CC BY-SA 2.0.
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What Do You Teach?

- HS Language Arts
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- HS Librarian
- Administrator
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- Higher Ed Librarian
- Other
Agenda

1. News media
2. 2016 Presidential election overview
3. Rules of thumb for data literacy and voting
4. Sources of election information
5. Questions/discussion
News Media
Americans overwhelmingly think that news media are one-sided

<table>
<thead>
<tr>
<th></th>
<th>Deal fairly with all sides</th>
<th>Tend to favor one side</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>24%</td>
<td>74%</td>
</tr>
</tbody>
</table>

But more are divided in whether they think this about news they get online from friends and family

<table>
<thead>
<tr>
<th>Represents more than one side</th>
<th>Represents just one side</th>
<th>They don’t get this news from friends &amp; family online</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
<td>35%</td>
<td>33%</td>
</tr>
</tbody>
</table>


*See end of presentation for a list of resources used in this webinar.
2016 Presidential Election
2016 Presidential Election

- **February 1 to June 14**: Primaries
- **May 3**: Donald Trump became the presumptive Republican nominee
- **June 6**: Hillary Clinton became the presumptive Democratic nominee
  - Bernie Sanders is still active
- National conventions to determine the parties’ nominees for president and vice president:
  - **July 18-21**: Republican National Convention
  - **July 25-28**: Democratic National Convention
- **November 8**: Election

Image: “US Flag Backlit.jpg” by Jnn13, on Wikimedia Commons. CC BY-SA 2.0.
Rules of Thumb for Data Literacy and Voting
1. Know how polling works.

What is polling? How do they get those numbers?

As Charles Wheelan writes:
“...one might reasonably ask, How do we know all this? How can we draw such sweeping conclusions about the attitudes of hundreds of millions of adults? And how do we know whether those sweeping conclusions are accurate?” (170)
Definition, from Wheelan:

“A poll (or survey) is an inference about the opinions of some population that is based on the views expressed by some sample drawn from that population.” (170)

*A “poll” is also the place where voters cast their votes."
Ways that polls trip us up:

• Polls are formed from **samples** of a **population**.
  – *Is the sample representative of the population?*

• Types of bias:
  – **Nonresponse bias**: who chose *not* to participate in the poll
  – **Selection bias**: who participated in the poll

• Question **wording** and **order**
  – *How might respondents respond?*
There are different types of polls:

- **Interactive polls**: an interviewer speaks with a respondent.

- **Automated polls**: a robo-call to respondents. Respondents use their phone keypad to respond.

- **Online polls**: polls completed online, which are questionable because not all people have Internet access, and they have issues with bias.
Indications of a good poll:

● **Transparency** - Participates with these organizations:
  
<table>
<thead>
<tr>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Association for Public Opinion Research (AAPOR)</td>
</tr>
<tr>
<td>National Council on Public Polls (NCPP)</td>
</tr>
<tr>
<td>■ Includes article called “20 Questions A Journalist Should Ask About Polls Results”</td>
</tr>
<tr>
<td>Roper Center’s Polling Data</td>
</tr>
</tbody>
</table>

  ○ *Tip: Check out FiveThirtyEight’s Pollster Ratings! (You can delve *even* deeper by clicking on “How this works.”)

● **Methodology**
  ○ Representative of population
  ○ Type of poll
March 2016
Franklin & Marshall College Poll

SUMMARY OF FINDINGS

Prepared by:
Center for Opinion Research
Floyd Institute for Public Policy
Franklin & Marshall College

RACE. Which of the following categories best describes your racial background?

93% White
8% Non-white
Example: Pew Research Center report

- **Sample:** 2,245 adults, who are 18 and older, in the United States.
- **Methodology:** telephone interviews
  - 559 contacted by landlines
  - 1,686 contacted by cell phones
2. Apply statistical skills.

- **Questions to ask:**
  - What is the **sample**, and is it **representative**?
  - What kind of **average** is it?
    - Mean, median, or mode
  - What is the **inverse** of the statistic?
  - What is the **margin of error**?
    - + or - percentage points
3. Apply data visualization skills.

• **Type of chart or graph**
  – Is it the right one?
  – Is it used correctly?
  – Is it misleading?

• **Colors**
  – What are the colors supposed to indicate?
  – Do they make the data seem dramatic?
Example: Venn diagram by Hillary Clinton

90% of Americans

Support universal background checks

83% of gun owners

Dear Congress,

Let's get this done.

Thanks,

The vast majority of Americans

12:21 PM - 20 May 2016
Example: Revised visualization
Each dot is an opinion poll, and the lines indicate trends generated by HuffPost Pollster’s poll-tracking model. This chart is as of July 8, 2016.
It’s all about the 538 Electoral College votes

Here’s a map of the country, with each state sized by its number of electoral votes and shaded by the leading candidate's chance of winning it.
4. Look at multiple sources.

- We often talk about unbiased sources or reporting, which do not exist. Good methodology and bad methodology do exist.
- To combat that, look for multiple sources to understand an issue. Also, apply the statistics and data visualization skills that you have learned from other webinars.
- Making good, informed decisions about the sources of information that you read and cite is key.
- How?
  - Look for counterarguments on the issue.
  - Peruse a variety of sources, including ones that lean left and ones that lean right.
Sources for Election Information
Enter your address to find your polling place, build your ballot with our online voters’ guide and much more! With our voters’ guide you can see the races on your ballot, compare candidates’ positions side-by-side, and print out a “ballot” indicating your preferences as a reminder and take it with you to the polls on Election Day. Check out our resources for military and overseas voters!

http://www.vote411.org/
ECONOMIC VIEW

America Can Fix Its Student Loan Crisis. Just Ask Australia.

Other countries offer plans that give students more time to repay loans or that make provisions for fluctuating earnings, so fewer borrowers default.

12h ago - By SUSAN DYNARIKI

http://www.nytimes.com/section/upshot
DAILY COMMENT

OBAMA AND TRUMP AFTER DALLAS

BY DAVID REMNICK

A President can be judged on his ability to explain, to console, and to frame tragedy in the realm of both politics and emotion.
You can look many of these sources up on FiveThirtyEight’s Pollster ratings (next slide). For instance, Pew gets a B+.

http://www.pewresearch.org/
## Aggregators of Polls: FiveThirtyEight

**FiveThirtyEight’s Pollster Ratings**

By Nate Silver

FiveThirtyEight’s pollster ratings are calculated by analyzing the historical accuracy and the methodology of each firm’s polls. Accuracy scores account for the type of election, a poll’s sample size, the performance of other polls surveying the same race and other factors. We also calculate measures of statistical bias in the polls.

**See more:** The State Of The Polls, 2016 | How this works | Download the data

<table>
<thead>
<tr>
<th>POLLSTER</th>
<th>LIVE CALLER WITH CELLPHONES</th>
<th>INTERNET</th>
<th>NCPP/ AAPOR/ ROPER</th>
<th>POLLS ANALYZED</th>
<th>SIMPLE AVERAGE ERROR</th>
<th>RACES CALLED CORRECTLY</th>
<th>ADVANCED +/-</th>
<th>PREDICTIVE +/-</th>
<th>538 GRADE</th>
<th>BANNED BY 538</th>
<th>MEAN-REVERTED BIAS</th>
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</thead>
<tbody>
<tr>
<td>SurveyUSA</td>
<td></td>
<td></td>
<td></td>
<td>763</td>
<td>4.6</td>
<td>90%</td>
<td>-1.0</td>
<td>-0.8</td>
<td>A</td>
<td></td>
<td>D+0.1</td>
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<tr>
<td>YouGov</td>
<td></td>
<td></td>
<td></td>
<td>707</td>
<td>6.7</td>
<td>93%</td>
<td>-0.3</td>
<td>+0.1</td>
<td>B</td>
<td></td>
<td>D+1.6</td>
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<tr>
<td>Rasmussen Reports/ Pulse Opinion Research</td>
<td></td>
<td></td>
<td></td>
<td>657</td>
<td>5.3</td>
<td>79%</td>
<td>+0.4</td>
<td>+0.7</td>
<td>C+</td>
<td></td>
<td>R+2.0</td>
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<td>Zagby Interactive/JZ Analytics</td>
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<td></td>
<td>465</td>
<td>5.6</td>
<td>78%</td>
<td>+0.8</td>
<td>+1.2</td>
<td>C-</td>
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<td>R+0.8</td>
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<td>Mason-Dixon Polling &amp; Research, Inc.</td>
<td></td>
<td></td>
<td></td>
<td>415</td>
<td>5.2</td>
<td>86%</td>
<td>-0.4</td>
<td>-0.2</td>
<td>B+</td>
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<td>R+1.0</td>
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<td>Public Policy Polling</td>
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<td>383</td>
<td>4.9</td>
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<td>-0.1</td>
<td>B+</td>
<td></td>
<td>R+0.2</td>
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<td>Research 2000</td>
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<td></td>
<td></td>
<td>279</td>
<td>5.5</td>
<td>88%</td>
<td>+0.2</td>
<td>+0.6</td>
<td>F</td>
<td>X</td>
<td>D+1.4</td>
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</tbody>
</table>
Aggregators of Polls: HuffPost Pollster

HuffPost Pollster tracks thousands of public polls to give you the latest data on elections, political opinions and more. Read our FAQ.

Featured Charts

- 2016 General Election: Trump vs. Clinton
  - 46% Hillary Clinton
  - 40% Donald Trump
- 2016 National Republican Primary
  - 56% Donald Trump
  - 23% Ted Cruz
- 2016 National Democratic Primary
  - 54% Hillary Clinton
  - 39% Bernie Sanders
- Hillary Clinton Favorable Rating
  - 41% Favorable
  - 56% Unfavorable

http://elections.huffingtonpost.com/pollster
## Latest Polls

**Election Polls | President Polls | State Polls | Senate Polls | House Polls | Governor Polls | Approval Polls**

**Saturday, July 9**

<table>
<thead>
<tr>
<th>Race/Topic</th>
<th>Poll</th>
<th>Results</th>
<th>Spread</th>
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<tbody>
<tr>
<td>President Obama Job Approval</td>
<td>Gallup</td>
<td>Approve 51, Disapprove 45</td>
<td>Approve +6</td>
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</tbody>
</table>

**Friday, July 8**

<table>
<thead>
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<th>Race/Topic</th>
<th>Poll</th>
<th>Results</th>
<th>Spread</th>
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</thead>
<tbody>
<tr>
<td>General Election: Trump vs. Clinton vs. Johnson</td>
<td>Rasmussen Reports</td>
<td>Clinton 38, Trump 40, Johnson 9</td>
<td>Trump +2</td>
</tr>
<tr>
<td>California Senate - Harris vs. Sanchez</td>
<td>Field</td>
<td>Harris 30, Sanchez 24</td>
<td>Harris +15</td>
</tr>
<tr>
<td>President Obama Job Approval</td>
<td>Rasmussen Reports</td>
<td>Approve 49, Disapprove 50</td>
<td>Disapprove +1</td>
</tr>
</tbody>
</table>

**Recommended**

- Trump’s Capitol Hill Visit Fails to Bring Party Unity
- Where Clinton, Trump Stand on Energy, Climate Change
- Giuliani: Clinton Broke the Law; Gross Negligence Means Extreme Carelessness
- Trump the Outsider Looks for Insider Running Mate
- President Obama Slows Troop Withdrawal From Afghanistan

What are your favorites?
Resources


http://projects.fivethirtyeight.com/pollster-ratings/.


Icons courtesy of The Noun Project.
Recap:
1. Know how polling works.
2. Apply statistical skills.
3. Apply data visualization skills.
4. Look at multiple sources.

Questions?

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Martha Stuit
Email: stuitm@umich.edu
Recap:

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Evaluation: