Comparing Online Panels and IVR Samples

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Study 1: Polls and Mode of Data Collection
Study 2: Online Panel “House Effects”
Study 3: Mix Mode and Midterms 2018
Conclusion
Trend on Mode of Data Collection
2012, 2016, and 2018

2018
- Online: 6%
- Mixed Mode: 24%
- Live Operator: 30%
- IVR: 40%

2018*
- Online: 7%
- Mixed Mode: 22%
- Live Operator: 29%
- IVR: 43%

2016
- Online: 15%
- Mixed Mode: 9%
- Live Operator: 18%

2012
- Online: 6%
- Mixed Mode: 16%
- Live Operator: 37%
- IVR: 41%

2018* includes Congressional races
IVR and Age

Nevada Poll

IVR

- 9% (18-29)
- 23% (30-49)
- 69% (50+)

US Census*

- 9% (18-29)
- 21% (30-49)
- 44% (50+)

South Carolina Poll

IVR

- 9% (18-34)
- 28% (35-54)
- 47% (55+)

US Census*

- 4% (18-34)
- 21% (35-54)
- 32% (55+)

*Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates
Trend on Mode of Data Collection
2012, 2016, and 2018

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- Online: 7%
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- Online: 9%
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- IVR: 58%

2012
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2018* includes Congressional races
• **Absolute Difference (Mosteller, 1949)**
  
  Poll Margin \((r1 - d1)\) minus Vote Margin \((R2 - D2)\)

  Example: \((55\% - 45\%) - (51\% - 49\%)\)

  This gives us a Deviation metric: \(10 - 2 = 8\)

• **Statistical Accuracy (Kimball, 2017)**

  Poll Margin \((r1 - d1)\) minus Vote Margin \((R2 - D2)\) ≤ \((\text{MOE} \times 2)\)

  – If \(n=1,000; +/-3\%\),
    
    \(8 \leq 6 \text{ NSA}\)

  – If \(n=400; +/-4.9\%\),
    
    \(8 \leq 9.8 \text{ SA}\)
Historical Absolute Difference
2012, 2016, and 2018

2018* includes Congressional races

2012 2016 2018* 2018
IVR 3.5 4.2 4.6 5.6 6.5
Live Operator 3.5 4.4 4.6 4.7 5.6
Mixed Mode 2.1 2.1 4.2 5.9 6.5
Online 2.6 5.1 5.2 5.5
Total 3.3 4.8 4.5
# Historical Statistical Accuracy

2012, 2016, and 2018

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2016</th>
<th>2018*</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVR</td>
<td>92%</td>
<td>81%</td>
<td>63%</td>
<td>67%</td>
</tr>
<tr>
<td>Live Operator</td>
<td>92%</td>
<td>94%</td>
<td>94%</td>
<td>94%</td>
</tr>
<tr>
<td>Mixed Mode</td>
<td>78%</td>
<td>74%</td>
<td>77%</td>
<td>74%</td>
</tr>
<tr>
<td>Online</td>
<td>86%</td>
<td>83%</td>
<td>77%</td>
<td>77%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>98%</td>
<td>98%</td>
<td>94%</td>
</tr>
</tbody>
</table>

2018* includes Congressional races
Data Collection

• Since 1970s
• The Gold Standard

Mixed Mode
• Balancing telephone and online panels

Telephone

Online

• Future Gold Standard
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# US House Effects 2016 and 2018

## 2016

<table>
<thead>
<tr>
<th>Mode (Online)</th>
<th>Statistical Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>UPI/CVOTER</td>
<td>91.9%</td>
</tr>
<tr>
<td>YouGov</td>
<td>90.9%</td>
</tr>
<tr>
<td>Ipsos</td>
<td>78.0%</td>
</tr>
<tr>
<td>SurveyMonkey</td>
<td>65.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>77.1%</td>
</tr>
</tbody>
</table>

\[ \chi^2 (3, N = 297) = 24.17, p < .000 \]

## 2018

<table>
<thead>
<tr>
<th>Mode (Online)</th>
<th>Statistical Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>UPI/CVOTER</td>
<td>53.8%</td>
</tr>
<tr>
<td>YouGov</td>
<td>100.0%</td>
</tr>
<tr>
<td>Ipsos</td>
<td>81.8%</td>
</tr>
<tr>
<td>Research Co.</td>
<td>85.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>74.4%</td>
</tr>
</tbody>
</table>

\[ \chi^2 (3, N = 68) = 11.097, p < .011 \]
Amazon Turk
$0.25 - $1.5

Survey Monkey – $4.5

Dynata (SSI) – $4

Opinion Access - $3
## Emerson Polling

### Panel Composition Comparison

Chi-Square Test

<table>
<thead>
<tr>
<th></th>
<th>AZ</th>
<th>FL</th>
<th>IA</th>
<th>MI</th>
<th>MN</th>
<th>NM</th>
<th>TN</th>
<th>WI</th>
<th>USA</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td><strong>Demographic</strong></td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>-</td>
<td>3</td>
<td>1</td>
<td>5</td>
<td>18</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.001</td>
</tr>
<tr>
<td><strong>Party</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.023</td>
</tr>
<tr>
<td><strong>Race/ethnicity</strong></td>
<td>-</td>
<td>-</td>
<td>0.008</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>0.000</td>
<td>0.006</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>-</td>
<td>0.000</td>
<td>0.004</td>
<td>0.000</td>
<td>7</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>-</td>
<td>-</td>
<td>0.003</td>
<td>0.002</td>
<td>-</td>
<td>-</td>
<td>0.007</td>
<td>-</td>
<td>-</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>USC district/state</strong></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.049</td>
<td>0.031</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.047</td>
</tr>
</tbody>
</table>

#### Significant Variables
- **Race/ethnicity** (0.000)
- **Age** (0.000)
- **Education** (0.000)
- **USC district/state** (0.047)
Age Breakdown (House Effects)
6 Polls (Summer 2018)
Age Breakdown (House Effects)
3 Polls (Summer 2018)
Age Breakdown (House Effects)
National Poll

*Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates
Age Breakdown (House Effects)

Minnesota Poll

- MTurk:
  - 18-29: 28%
  - 30-49: 21%
  - 50+: 51%

- Dynata (SSI):
  - 18-29: 21%
  - 30-49: 21%
  - 50+: 46%

- US Census*:
  - 18-29: 21%
  - 30-49: 33%
  - 50+: 34%
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2018 Midterm Study

Mix Mode Midterm 2018 Study

2018 Midterm Elections

DEMOCRAT BLUE WAVE

REPUBLICAN RED WALL

versus

amazon

mechanical turk

dynata™
Pre-election Polls 2018

Online panel
- MTurk
- Dynata (SSI)
2018 Midterms Results

**Statistical Accuracy**

- MTurk: 100%
- Dynata (SSI): 89%

**Absolute Difference**

- MTurk: 2.7
- Dynata (SSI): 4.4
- Dynata (SSI) 2.5
- Dynata (SSI) Statewide: 5.5
### MTurk/ Dynata (SSI) Midterms

- **31 Statewide polls in 20 States**
  - 17 MTurk
  - 14 Dynata (SSI)
- **Dynata (SSI): 1 poll NSA**
  - NM US Senate, Deviation 6.9
- **23 Congressional polls on Dynata (SSI): 3 polls are NSA**
  - KS D1, Deviation 21.9
  - NM D1, Deviation 12.6
  - NM D3, Deviation 15.1

### Governor (MTurk)
- Garcia Ducey* AZ
- Gillum DeSantis FL
- Abrams Kemp GA
- Whitmer Schuette MI
- Cordray DeWine OH
- Dean Lee TN
- Valdez Abbott* TX
- Evers Walker* WI

### Governor (Dynata/SSI)
- Lamont Stefanowski CT
- Hubbell Reynolds* IA
- Kelly Kobach KS
- Mills Moody ME
- Sisolak Laxalt NV
- Kelly Sununu* NH
- Lujan Pearce NM
- Grisham Buehler OR
- Sutton Noem SD

### US Senate (MTurk)
- Sinema McSally AZ
- Nelson* Scott FL
- Stabenow James MI
- McCaskill* Hawley MO
- Menendez Hugin NJ
- Brown* Renacci OH
- Bredesen Blackburn TN
- O’Rourke Cruz* TX
- Baldwin* Vukmir WI

### US Senate (Dynata/SSI)
- Murphy* Corey CT
- King* Brakely ME
- Rosen Heller* NV
- Heinrich* Rich NM
- Manchin* Morrisey WV

### US House (Dynata/SSI)
- Bjorkman Johnson SD AtL
- Finkenauer Blum* IA D-1
- Loebsack* Peters IA D-2
- Axne Young* IA D-3
- Scholten King* IA D-4
- LaPolice Marshall* KS D-1
- David Watkins KS D-2
- Davids Yoder* KS D-3
- Thompson Estes* KS D-4
- Pingree* Holbrook ME D-1
- Golden Poliquin* ME D-2
- Titus* Bentley NV D-1
- Koble Amodei* NV D-2
- Lee Tarkanian NV D-3
- Horsford Hardy NV D-4
- Pappas Edwards NH D-1
- Kuster Nebron NH D-2
- Hoalland Arnold-Jones NM D-1
- Torres Small Horrell NM D-2
- Lujan* McFall NM D-3
- Fershee McKinley* WV D-1
- Sergent Mooney* WV D-2
- Ojeda Miller WV D-3
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- Mixed mode polls are growing in popularity and reliability
- Proprietary Online Panels
- “House Effect” and Age
- MTurk data has value but limits
Thank you

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