Probability Panel Science – Where are we now?

September 8, 2023

David Dutwin
SVP NORC
Chief Scientist, AmeriSpeak
Presentation Goals:

• What is the current state of the practice for probability panels
• Examples of Federal surveys which utilize probability panels
• Next steps in the evolution of probability panels
What is the current state of the practice for probability panels (and therefore, what are the next steps?)
AmeriSpeak has the highest AAPOR panel recruitment response rate.

We combine the speed and cost-effectiveness of probability-based panels with a unique approach that captures a true picture of America.

**Response Rate**
AmeriSpeak knocks on the doors of people who don’t respond to our initial outreach. This extra effort gives us an industry-leading recruitment response rate of 30 percent.

**Sample Representativeness**
Our rigorous recruitment makes AmeriSpeak’s panel truly reflective of the entire U.S. population. We survey hard-to-reach segments such as low-income households, young adults, and social and political conservatives.

**Survey Consistency**
AmeriSpeak has low participant turnover and survey fatigue, with an industry-leading retention of about 85 percent. Respondents are limited to one survey a week, so they’re more likely to provide thoughtful answers.
By the Numbers

60K+
Participating Households
(50 States + DC)

2M+
Client Surveys Completed
(Since 2015 thru June 2022)

30%
Panel Recruitment Response
(AAPOR RR3 with Nonresponse Follow-up)
History of Innovations on AmeriSpeak Panel to Recruit, Engage, and Retain Diverse and Hard-to-Recruit (H2R) Segments of the U.S. Population

- **2014**
  - Pilot Phase
- **'15**
  - Panel is Founded
- **'16**
  - GenForward: Racially and ethnically diverse young Americans (ages: 18-34)
- **'17**
  - Spanish Recruitment Field Experiments
- **'18**
  - Improving Sample Representation at the State Level
- **'19**
  - New Latino Panel
- **'20**
  - Utilizing Big Data Classifiers
- **'21**
  - Foresight 50+
  - Incentive Experiments H2R segments
- **2022**
  - AANHPI Panel Pilot

Oversample areas and HHs with higher concentration of young adults, Hispanics, and NH African-Americans.
Panel Recruitment Oversampling Innovations for AmeriSpeak (2014–Present)

- **2014**: Pilot Phase
- **2015**: Panel is Founded
- **2016**: GenForward Racially and ethnically diverse young Americans (ages: 18-34)
- **2017**: Spanish Recruitment Field Experiments
- **2018**: New Latino Panel
- **2019**: Improving Sample Representation at the State Level
- **2020**: Utilizing Big Data Classifiers
- **2021**: Foresight 50+
- **2022**: Incentive Experiments

Oversample areas and HHs with higher concentration of young adults, Hispanics, and NH African-Americans
Foresight 50+ and Asian American, Native Hawaiian, and Pacific Islander (AANHPI) Panel

- 2014: Pilot Phase
- 2015: Panel is Founded
- 2016: GenForward Racially and ethnically diverse young Americans (ages: 18-34)
- 2017: Spanish Recruitment Field Experiments
- 2018: Improving Sample Representation at the State Level
- 2019: New Latino Panel
- 2020: Incentive Experiments H2R segments
- 2021: Utilizing Big Data Classifiers
- 2022: Foresight 50+ AANHPI Panel Pilot

Oversample areas and HHs with higher concentration of young adults, Hispanics, and NH African-Americans
How does AmeriSpeak address the challenge of representing the entire population?

2-STAGE RECRUITMENT

Mail/Phone Contacting

Face-to-Face (F2F) Contacting
OVERSAMPLING INNOVATIONS (2014-PRESENT)

Oversample Census Tracts with 33%+ Hispanic and NH Black and 12%+ young adult share

Oversample Hispanics, NH Blacks, and young adults identified by commercial auxiliary data

2017 ABS Frame Supplement: Oversample HHs identified by commercial auxiliary data as likely Spanish-speaking HHs

Oversample Hispanics, NH Blacks, and young adults identified by commercial auxiliary data

Responders

Active for Client Surveys

Nonresponse Followup

Face to Face Interviewing
Fed Ex or Priority Mailing
Enhanced Incentive

WEB | Phone
Recruitment Profile Survey

NORC National Frame

Invited Sample

Initial Recruitment

Postcards | Recruitment Package | Telephone

Not Selected

Random Selection

Non-Responders
Current State of Practice: Considerations for Panel Data Quality

- Recruiting
- Retention
- Sampling, Fielding, Weighting
- Special Panel Error

Data Quality
Recruiting

**Sampling Ahead of Nonresponse**
- Panels know better than cross-sections what their nonresponse will be
- Opportunity to over-recruit who will be underrepresented
- AmeriSpeak solution: Big Data Classifiers (Dutwin et al., 2023)

**Maximizing Recruiting Rates**
- Panels are A-B machines!
- Materials design: Peekaboo, mailing types and frequencies, and “the argument”
- Operational design: Number of mailings, recruitment modalities, timing, etc.
- Incentive strategies

**The Value of NRFU: Getting More of What You Don’t Have**
- Low SES respondents
- A different profile of people
- Somewhat less inclined to offer strong opinions
**Recruiting: NRFU**

Demographics by Recruitment Mode and Benchmark (ACS)

<table>
<thead>
<tr>
<th>Mode of Recruiting</th>
<th>Benchmark</th>
<th>NRFU Recruits</th>
<th>Initial Recruits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Young Adults (18-24)</td>
<td>7%</td>
<td>28%</td>
<td>10%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11%</td>
<td>10%</td>
<td>9%</td>
</tr>
<tr>
<td>No HS diploma</td>
<td>9%</td>
<td>9%</td>
<td>8%</td>
</tr>
<tr>
<td>HS graduate or equivalent</td>
<td>14%</td>
<td>26%</td>
<td>10%</td>
</tr>
</tbody>
</table>

**Impact of NRFU on Psychological/Personality-Based Measures**

- Authoritarianism*
- Political Uncontrol**
- Narcissism***
- Trust***
- Extroversion***
- Honesty***

Bilgen 2022: NRFU Produces Significantly Different Estimates 22% Attitudes and Opinions
CONSIDERATIONS FOR PANEL DATA QUALITY

Retention: The New Model

Not All Panelists Have the Same Needs
- Panelists differentially dropout, particularly in the first three months
- Panelists don’t all want to do the same number of surveys
- Some recruits need more “hand holding” to become recruits

Key Considerations
- Fighting attrition
- Dealing with burden
- Maintaining engagement

Current Best Practices
- Communications
- Burden
  - Topics
  - Frequency
  - Length
Retention and Burden

Average Survey Invitations Per Month (by Quarter)

Participation Rates By Annual Panelist
Survey Sampling, Fielding and Weighting

Key Areas of Consideration:

- Stratified sampling approaches and implications
- Fielding: “custom, semi-custom, and stock”
- Weighting: considerations of fit for purpose
Dealing with “Specialness” of Panels

Key Areas of Consideration:

• Differential attrition by recruiting cohort: implications for representation
• Reporting attrition statistics
• Considering panel conditioning
• Considering topic-specific conditioning

Comparison of Demographics by Sample Type and the ACS
Examples of Federal surveys which utilize probability panels
“Rapid Surveys” Program

Collaboration between Division of Health Interview Statistics and Division of Research and Methodology
Case Study: RANDS During COVID-19

AmeriSpeak and TrueNorth
The CDC’s National Center for Health Statistics sought timely information on Covid-19 related to:

- Loss of work due to illness with COVID-19
- Telemedicine access and use before and during the pandemic
- Reduced access to specific types of health care
- Other topics
NORC’s probability panel with an industry-leading response rate

A solution that combines AmeriSpeak Panel data with non-probability online surveys to obtain large sample sizes

- Leveraging non-probability samples has benefit for expanding sample size reach but at a cost of introducing error (sample noncoverage, non-response, measurement error)
- NORC’s proprietary TrueNorth statistical technique for reducing error introduced by self-selected non-probability samples by identifying the most powerful predictors in the AmeriSpeak and Census data for correcting error in the non-probability interviews
**Survey Details for the AmeriSpeak Longitudinal Survey**

- Two-wave longitudinal survey in summer 2020
- Random sample from the AmeriSpeak Panel (age 18+)
- n=6,800 interviews at baseline (June/July 2020)
- n=5,981 interviews at follow-up (August 2020)
- 15–20-minute survey
- Interviews online and by phone for the offline segment

**Survey Details for the TrueNorth Cross-Sectional Survey**

- Supplemented fresh cross-sectional non-probability opt-in sample to increase the sample size
- n=6,220 opt-in collected during AmeriSpeak baseline
- n=5,502 opt-in collected during AmeriSpeak follow-up
For persons 18 to 44, about 1.5% to 2.0% were unable to work in the previous week due to a personal or family member illness with COVID-19.

**Percentage unable to work in the prior week due to personal or family member illness with coronavirus**

[Bar chart showing percentages for different age groups and time rounds.]

Source: [https://www.cdc.gov/nchs/covid19/rands/work.htm](https://www.cdc.gov/nchs/covid19/rands/work.htm)
Respondents reported slightly higher access to telemedicine during the earlier phases of the pandemic in summer ‘20, compared to May/June ‘21.

### Percentage with provider who offered telephone or video appointments (responded “Yes”)

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<tr>
<td>18-44 years</td>
<td>30</td>
<td>35</td>
<td>32</td>
</tr>
<tr>
<td>45-64 years</td>
<td>35</td>
<td>38</td>
<td>40</td>
</tr>
<tr>
<td>65 and older</td>
<td>40</td>
<td>45</td>
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Source: [https://www.cdc.gov/nchs/covid19/rands/work.htm](https://www.cdc.gov/nchs/covid19/rands/work.htm)
Slight directional decline in the percentage of adults unable to receive a regular checkup in the last two months (i.e., access slightly improving)

Percentage unable to receive a regular checkup in the last two months for any reason

Source: https://www.cdc.gov/nchs/covid19/randswork.htm
OMB-Approved Surveys Using AmeriSpeak
# U.S. Office of Management and Budget (OMB) Approved AmeriSpeak® Panel Information Collections

<table>
<thead>
<tr>
<th>Project Name</th>
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<tbody>
<tr>
<td>W&amp;I Taxpayer Experience Survey (TES)</td>
<td>Internal Revenue Services, Wage and Investment Division (W&amp;I)</td>
<td>1545-0525</td>
<td>5/2017</td>
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<tr>
<td>Test Predictability of Falls Screening Tools</td>
<td>Centers for Disease Control and Prevention, National Center for Injury Prevention and Control (NCIPC)</td>
<td>0920-1220</td>
<td>3/2018</td>
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<tr>
<td>2018 College Student and Recent Graduates’ Knowledge of DoD Careers and Scholarship Opportunities Survey</td>
<td>U.S. Department of Defense (DoD)</td>
<td>0704-0553</td>
<td>3/2018</td>
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<td>Research and Development Survey (RANDS)</td>
<td>Centers for Disease Control and Prevention, National Center for Health Statistics (NCHS)</td>
<td>0902-1323</td>
<td>2/2019</td>
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<tr>
<td>Research and Development Survey (RANDS) during COVID19</td>
<td>Centers for Disease Control and Prevention, National Center for Health Statistics (NCHS)</td>
<td>0920-1298</td>
<td>5/2020</td>
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<tr>
<td>Rapid Surveys System (RSS)</td>
<td>Centers for Disease Control and Prevention, National Center for Health Statistics (NCHS)</td>
<td>0920-1408</td>
<td>6/2023</td>
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<tr>
<td>Customer Experience, Expectations, and Needs Survey (CEEN)</td>
<td>Internal Revenue Services, Small Business/Self-Employed Division (SB/SE)</td>
<td>1545-1432</td>
<td>3/2020</td>
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<tr>
<td>COVID-19 Attitudes and Beliefs Survey (CABS)</td>
<td>Department of Health and Human Services, Office of the Assistant Secretary for Public Affairs (ASPA)</td>
<td>0990-0475</td>
<td>7/2021</td>
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<tr>
<td>Office on Women’s Health Post-Partum Depression</td>
<td>Department of Health and Human Services, Office on Women’s Health and Family Services (OWHFS)</td>
<td>0990-0281</td>
<td>1/2021</td>
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<tr>
<td>Reducing the Illegal Passing of School Buses</td>
<td>Department of Transportation, National Highway Traffic Safety Administration (NHTSA)</td>
<td>2127-0755</td>
<td>12/2021</td>
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<td>Pilot Study for Understanding Economic Risk for Low Income Families</td>
<td>Office of the Assistant Secretary for Planning and Evaluation (ASPE)</td>
<td>0990-0281</td>
<td>Pending</td>
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<td>Teen and Parent Surveys of Health (TAPS)</td>
<td>Centers for Disease Control and Prevention (CDC)</td>
<td>0920-1362</td>
<td>10/2021</td>
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Next steps in the evolution of probability panels: In two words: Specialty Panels
Specialty Panels

A collaboration between AARP and NORC at University of Chicago, Amplify AAPI is the largest, most representative public opinion panel of Asian American, Native Hawaiian, and Pacific Islander communities.

Scientific Excellence

The diverse needs and stories of AAPI communities deserve to be told with complete accuracy.

While most public opinion surveys are conducted in only English and Spanish, we provide unprecedented insights by conducting interviews in English, Mandarin, Cantonese, Korean, and Vietnamese. We deliver best-in-class research to decision-makers who can’t afford to be wrong.

Through its rigorous, scientific approach, Amplify AAPI illuminates the diverse needs, opinions, and experiences of AAPI communities.
AmeriSpeak Federal

AmeriSpeak Federal is a new NORC panel with features designed to better fit expectations within Federal clients with regard to response rate and data quality. Its main differentiators to AmeriSpeak “main” are:

- A modified sampling geared more toward NRFU, and
- Greater effort in fielding
- BOTH are meant to secure higher response rates

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<tr>
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<th>AAPOR RR3 Household Recruitment Rate</th>
<th>Estimated Cooperation Rate</th>
<th>Estimated AAPOR RRD Response Rate</th>
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<tr>
<td>AmeriSpeak</td>
<td>22%</td>
<td>40%</td>
<td>9%</td>
</tr>
<tr>
<td>AmeriSpeak Federal Panel</td>
<td>31%</td>
<td>65%</td>
<td>20%</td>
</tr>
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Thank You!