

Methodology

The American Trends Panel survey methodology

Overview

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults. Panelists participate via self-administered web surveys. Panelists who do not have internet access at home are provided with a tablet and wireless internet connection. Interviews are conducted in both English and Spanish. The panel is being managed by Ipsos.

Data in this report is drawn from the panel wave conducted May 17 to May 31, 2021. The sample is comprised of panelists who indicated that they use Twitter on the Wave 85 survey conducted on the ATP in March 2021. A total of 2,548 panelists responded out of 2,643 who were sampled, for a response rate of 96%. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 4%. The break-off rate among panelists who logged on to the survey and completed at least one item is less than 1%. The margin of sampling error for the full sample of 2,548 respondents is plus or minus 3.4 percentage points.

Panel recruitment

The ATP was created in 2014, with the first cohort of panelists invited to join the panel at the end of a large, national, landline and cellphone random-digit-dial survey that was conducted in both English and Spanish. Two additional recruitments were conducted using the same method in 2015 and 2017, respectively. Across these three surveys, a total of 19,718 adults were invited to join the ATP, of whom 9,942 (50%) agreed to participate.

In August 2018, the ATP switched from telephone to address-based recruitment. Invitations were sent to a random, address-based sample of households selected

American Trends Panel recruitment surveys

| Recruitment dates | Mode | Invited | Joined | Active panelists remaining |
|---|-----------------------|---------------|---------------|----------------------------|
| Jan. 23 to March 16, 2014 | Landline/ cell RDD | 9,809 | 5,338 | 2,181 |
| Aug. 27 to Oct. 4, 2015 | Landline/ cell RDD | 6,004 | 2,976 | 1,241 |
| April 25 to June 4, 2017 | Landline/ cell RDD | 3,905 | 1,628 | 620 |
| Aug. 8 to Oct. 31, 2018 | ABS | 9,396 | 8,778 | 5,893 |
| Aug. 19 to Nov. 30, 2019 | ABS | 5,900 | 4,720 | 2,323 |
| June 1 to July 19, 2020; Feb. 10 to March 31, 2021 | ABS | 3,197 | 2,812 | 2,442 |
| | Total | 38,211 | 26,252 | 14,700 |

Note: Approximately once per year, panelists who have not participated in multiple consecutive waves or who did not complete an annual profiling survey are removed from the panel. Panelists also become inactive if they ask to be removed from the panel.

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from the U.S. Postal Service's Delivery Sequence File. Two additional recruitments were conducted using the same method in 2019 and 2020, respectively. Across these three address-based recruitments, a total of 18,493 adults were invited to join the ATP, of whom 16,310 (88%) agreed to join the panel and completed an initial profile survey. In each household, the adult with the next birthday was asked to go online to complete a survey, at the end of which they were invited to join the panel. Of the 26,252 individuals who have ever joined the ATP, 14,700 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

The U.S. Postal Service's Delivery Sequence File has been estimated to cover as much as 98% of the population, although some studies suggest that the coverage could be in the low 90% range.¹ The American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

Sample design

The overall target population for this survey was Twitter users ages 18 and older, living in the U.S., including Alaska and Hawaii. The sample consisted of 2,643 panelists who indicated that they use Twitter on the Wave 85 survey conducted on the ATP in March 2021.

Questionnaire development and testing

The questionnaire was developed by Pew Research Center in consultation with Ipsos. The web program was rigorously tested on both PC and mobile devices by the Ipsos project management team and Pew Research Center researchers. The Ipsos project management team also populated test data which was analyzed in SPSS to ensure the logic and randomizations were working as intended before launching the survey.

Incentives

All respondents were offered a post-paid incentive for their participation. Respondents could choose to receive the post-paid incentive in the form of a check or a gift code to Amazon.com or could choose to decline the incentive. Incentive amounts ranged from \$5 to \$20 depending on whether the respondent belongs to a part of the population that is harder or easier to reach. Differential incentive amounts were designed to increase panel survey participation among groups that traditionally have low survey response propensities.

Data collection protocol

¹ AAPOR Task Force on Address-based Sampling. 2016. "[AAPOR Report: Address-based Sampling](#)."

The data collection field period for this survey was May 17 to May 31, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on May 17, 2021.

Invitations were sent out in two separate launches: Soft Launch and Full Launch. Sixty panelists were included in the soft launch, which began with an initial invitation sent on May 17, 2021. The ATP panelists chosen for the initial soft launch were known responders who had completed previous ATP surveys within one day of receiving their invitation. All remaining English- and Spanish-speaking panelists were included in the full launch and were sent an invitation on May 18, 2021.

All panelists with an email address received an email invitation and up to four email reminders if they did not respond to the survey. All ATP panelists that consented to SMS messages received an SMS invitation and up to four SMS reminders.

Invitation and reminder dates

| | Soft Launch | Full Launch |
|--------------------------|--------------------|--------------------|
| Initial invitation | May 17, 2021 | May 18, 2021 |
| 1 st reminder | May 21, 2021 | May 21, 2021 |
| 2 nd reminder | May 24, 2021 | May 24, 2021 |
| 3 rd reminder | May 26, 2021 | May 26, 2021 |
| Final reminder | May 28, 2021 | May 28, 2021 |

Data quality checks

To ensure high-quality data, the Center's researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. This includes checking for very high rates of leaving questions blank, as well as always selecting the first or last answer presented. As a result of this checking, 1 ATP respondent was removed from the survey dataset prior to weighting and analysis.

Weighting

The ATP data was weighted in a multistep process that accounts for multiple stages of sampling and nonresponse that occur at different points in the survey process. First, each panelist begins with a base weight that reflects their probability of selection for their initial recruitment survey (and the probability of being invited to participate in the panel in cases where only a subsample of respondents

were invited). The base weights for panelists recruited in different years are scaled to be proportionate to the effective sample size for all active panelists in their cohort. To correct for nonresponse to the initial recruitment surveys and gradual panel attrition, the base weights for all active panelists are calibrated to align with the population benchmarks identified in the accompanying table to create a full-panel weight.

For ATP waves in which only a subsample of panelists are invited to participate, a wave-specific base weight is created by adjusting the full-panel weights for subsampled panelists to account for any differential probabilities of selection for the particular panel wave. For waves in which all active panelists are invited to participate, the wave-specific base weight is identical to the full-panel weight.

In the final weighting step, the wave-specific base weights for panelists who completed the survey are again calibrated to match the population benchmarks specified above. These weights are trimmed (typically at about the 1st and 99th percentiles) to reduce the loss in precision stemming from variance in the weights. Sampling errors and test of statistical significance take into account the effect of weighting.

For this wave, the sample was weighted to align with benchmarks that were estimated among all Twitter users who responded to Wave 85.

Weighting dimensions

| Variable | Benchmark source |
|--|--------------------------------|
| Age x Gender | Twitter users from ATP Wave 85 |
| Education x Gender | |
| Education x Age | |
| Race/Ethnicity x Education | |
| Born inside vs. outside the U.S. among Hispanics and Asian Americans | |
| Years lived in the U.S. | |
| Census region x Metro/Non-metro | |
| Volunteerism | |
| Voter registration | |
| Party affiliation | |
| Frequency of Internet use | |
| Religious affiliation | |

Note: These dimensions were also used to construct the Wave 85 weight. See the Wave 85 methodology statement for more details.

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The following table shows the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% level of confidence for different groups in the survey.

| Group | Unweighted sample size | Plus or minus ... |
|--------------|---------------------------|-----------------------|
| Total sample | 2,548 | 3.4 percentage points |

Sample sizes and sampling errors for other subgroups are available upon request. In addition to sampling error, one should bear in mind that question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of opinion polls.

Dispositions and response rates

| Final dispositions | AAPOR code | Total |
|--|-------------------|--------------|
| Completed interview | 1.1 | 2,548 |
| Logged onto survey; broke-off | 2.12 | 14 |
| Logged onto survey; did not complete any items | 2.1121 | 8 |
| Never logged on (implicit refusal) | 2.11 | 72 |
| Survey completed after close of the field period | 2.27 | 0 |
| Completed interview but was removed for data quality | | 1 |
| Screened out | | 0 |
| Total panelists in the survey | | 2,643 |
| Completed interviews | I | 2,548 |
| Partial interviews | P | 0 |
| Refusals | R | 95 |
| Non-contact | NC | 0 |
| Other | O | 0 |
| Unknown household | UH | 0 |
| Unknown other | UO | 0 |
| Not eligible | NE | 0 |
| Total | | 2,643 |
| AAPOR RR1 = $I / (I+P+R+NC+O+UH+UO)$ | | 96% |

| Cumulative response rate | Total |
|---|--------------|
| Weighted response rate to recruitment surveys | 12% |
| % of recruitment survey respondents who agreed to join the panel, among those invited | 69% |
| % of those agreeing to join who were active panelists at start of Wave W90 | 56% |
| Response rate to Wave W90 survey | 96% |
| Cumulative response rate | 4% |

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