

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 June 14 to June 27, 2021. A total of 10,606 panelists responded out of 11,699 who were sampled, for a response rate of 91%. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 3%. The break-off rate among panelists who logged on to the survey and completed at least one item is 1%. The margin of sampling error for the full sample of 10,606 respondents is plus or minus 1.5 percentage points.

Analyses in this report are conducted among the set of panelists who responded to both this wave and to a previous wave conducted April 5 to April 11, 2021. A total of 4,042 panelists responded to both waves. The margin of sampling error for these 4,042 panelists is plus or minus 2.3 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 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, 11,699 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 ATP never uses breakout routers or chains that direct respondents to additional surveys.

Sample design

The overall target population for this survey was non-institutionalized persons ages 18 and older, living in the U.S., including Alaska and Hawaii.

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 the Center's 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

The data collection field period for this survey was June 14 to June 27, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on June 14, 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 June 14, 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

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

Spanish-speaking panelists were included in the full launch and were sent an invitation on June 15, 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	June 14, 2021	June 15, 2021
First reminder	June 17, 2021	June 18, 2021
Second reminder	June 21, 2021	June 21, 2021
Third reminder	June 23, 2021	June 23, 2021
Final reminder	June 25, 2021	June 25, 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, one 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.

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	10,606	1.5 percentage points
Respondents to April and June 2021 waves	4,042	2.3 percentage points
Gun owners	1,073	4.1 percentage points
Non-gun owners	2,875	2.8 percentage points
Rep/Lean Rep gun owners	645	5.0 percentage points
Rep/Lean Rep non-gun owners	859	5.0 percentage points
Dem/Lean Dem gun owners	412	7.1 percentage points
Dem/Lean Dem non-gun owners	1,923	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	10,606
Logged on to survey; broke-off	2.12	140
Logged on to survey; did not complete any items	2.1121	65
Never logged on (implicit refusal)	2.11	887
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		11,699
Completed interviews	I	10,606
Partial interviews	P	0
Refusals	R	1093
Non-contact	NC	0
Other	O	0
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		11,699
AAPOR RR1 = $I / (I+P+R+NC+O+UH+UO)$		91%

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 91	45%
Response rate to Wave 91 survey	91%
Cumulative response rate	3%

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