Methodology

The American Trends Panel survey methodology

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. The panel is managed by Ipsos.

Data in this report are drawn from the panel wave conducted Jan. 22 to Feb. 5, 2019. A total of 6,637 panelists responded out of 9,402 who were sampled, for a response rate of 71%. This included 5,599 from the ATP and oversamples of 530 non-Hispanic black and 508 Hispanic respondents sampled from Ipsos' KnowledgePanel. The cumulative response rate accounting for nonresponse to the recruitment surveys and attrition is 4.4%. The margin of sampling error for the full sample of 6,637 respondents is plus or minus 1.7 percentage points.

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	2,510
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,470
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	806
Aug. 8, 2018–Oct. 31, 2018	ABS/web	9,396	8,778	8,731
Total		**29,114**	**18,720**	**13,517**

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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The subsample from the ATP was selected by grouping panelists into five strata so demographic groups that are underrepresented in the panel had a higher probability of selection than overrepresented groups:

- Stratum A consists of panelists who are non-internet users, have a high school education or less, non-Hispanic blacks, Hispanics, or non-Hispanic Asians. They were sampled at a rate of 100%.

- Stratum B consists of panelists that are unregistered to vote or non-volunteers. They were sampled at a rate of 55%.

- Stratum C consists of panelists that are 18 to 34 years old. They were sampled at a rate of 16%.

- Stratum D consists of the remaining panelists. They were sampled at a rate of 7%.

Panelists were grouped into these strata in hierarchical order from A to E. For example, a panelist who is not registered to vote and has a high school education or less would be in Stratum B rather than in Stratum C.

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, and 9,942 of them agreed to participate.

In August 2018, the ATP switched from telephone- to address-based recruitment. Invitations were sent to a random, address-based sample (ABS) of households selected from the U.S. Postal Service's Delivery Sequence File. In each household, the adult with the next birthday was asked to go online to complete a survey, and, at the end, they were invited to join the panel. For a random half-sample of invitations, households without internet access were instructed to return a postcard. These households were contacted by telephone and sent a tablet if they agreed to participate. A total of 9,396 were invited to join the panel; 8,778 agreed to join the panel and completed an initial profile survey.

Of the 18,720 individuals who have ever joined the ATP, 13,517 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

Weighting

The data were weighted in a multistep process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that in 2014 and 2017 some respondents were subsampled for invitation to the panel. The sample was then combined with the non-Hispanic black and Hispanic oversamples and post-stratified to match federal benchmarks for race and Hispanic ethnicity. The next step in the weighting uses an iterative technique that aligns the sample to population benchmarks on the dimensions listed in the accompanying table.

Weighting dimensions

Variable	Benchmark source
Gender	2017 American Community Survey
Age	
Education	
Race/Hispanic origin	
Hispanic nativity	
Home internet access	
Region x Metropolitan status	2018 CPS March Supplement
Volunteerism	2015 CPS Volunteer Supplement
Voter registration	2016 CPS Voting and Registration Supplement
Party affiliation	Average of the three most recent Pew Research Center telephone surveys.

Note: Estimates from the ACS are based on non-institutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total US adult population.

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Sampling errors and tests of statistical significance take into account the effect of weighting. Interviews are conducted in both English and Spanish.

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.

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	6,637	1.7 percentage points
White	2,997	2.2 percentage points
Black	1,518	4.0 percentage points
Hispanic	1,574	3.6 percentage points
Asian	355	7.8 percentage points

Sample sizes and sampling errors for other subgroups are available upon request.