

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 April 5 to April 11, 2021 and included oversamples of Asian, Black and Hispanic Americans. A total of 5,109 panelists responded out of 5,970 who were sampled, for a response rate of 86%. This does not include two panelists who were removed from the data due to extremely high rates of refusal or straightlining. 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 2%. The margin of sampling error for the full sample of 5,109 respondents is plus or minus 2.1 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.

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	2,183
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	1,243
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	620
Aug. 8 to Oct. 31, 2018	ABS/web	9,396	8,778	5,895
Aug. 19 to Nov. 30, 2019	ABS/web	5,900	4,720	2,327
June 1 to July 19, 2020	ABS/web	1,865	1,636	1,269
	Total	36,879	25,076	13,537

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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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 17,161 adults were invited to join the ATP, of whom 15,134 (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 25,076 individuals who have ever joined the ATP, 13,537 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 non-institutionalized persons ages 18 and older, living in the U.S., including Alaska and Hawaii.

This study featured a stratified random sample from the ATP. The sample was allocated according to the following strata, in order: Asian Americans (including those who identify as Asian in combination with another race), Black Americans (including those who identify as Black in combination with another race), U.S.-born Hispanics, foreign-born Hispanics, tablet households, high school education or less, not registered to vote, people ages 18 to 34, uses internet weekly or less, nonvolunteers and all other categories not already falling into any of the above.

The Asian, Black, U.S.-born and foreign-born Hispanic strata were oversampled relative to their share of the U.S. adult population. The remaining strata were sampled at rates designed to ensure that the share of respondents in each stratum is proportional to its share of the U.S. adult population to the greatest extent possible. Respondent weights are adjusted to account for differential probabilities of selection as described in the Weighting section below.

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

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

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 April 5 to April 11, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on April 5, 2021.

On April 5 and April 6, 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 April 5, 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 April 6, 2021.

All panelists with an email address received an email invitation and up to two 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 two SMS reminders.

Invitation and reminder dates

	Soft Launch	Full Launch
Initial invitation	April 5, 2021	April 6, 2021
First reminder	April 8, 2021	April 8, 2021
Final reminder	April 10, 2021	April 10, 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, two ATP respondents were 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

Weighting dimensions

Variable	Benchmark source
Age x Gender	2019 American Community Survey
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	2019 CPS March Supplement
Volunteerism	2017 CPS Volunteering & Civic Life Supplement
Voter registration	2016 CPS Voting and Registration Supplement
Party affiliation	2020 National Public Opinion Reference Survey
Frequency of internet use	
Religious affiliation	

Note: Estimates from the ACS are based on non-institutionalized adults. The 2016 CPS was used for voter registration targets for this wave in order to obtain voter registration numbers from a presidential election year. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population. The 2020 National Public Opinion Reference Survey featured 1,862 online completions and 2,247 mail survey completions.

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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	5,109	2.1 percentage points
Subgroup 1		percentage points
Subgroup 2		percentage points
Subgroup 3		percentage points

Note: This survey includes [oversamples](#) of Asian, Black and Hispanic respondents. Unweighted sample sizes do not account for the sample design or weighting and do not describe a group's contribution to weighted estimates. See the [Sample design](#) and [Weighting](#) sections above for details.

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	5,109
Logged onto survey; broke-off	2.12	85
Logged onto survey; did not complete any items	2.1121	38
Never logged on (implicit refusal)	2.11	736
Survey completed after close of the field period	2.27	0
Completed interview but was removed for data quality		2
Screened out		0
Total panelists in the survey		5,970
Completed interviews	I	5,109
Partial interviews	P	0
Refusals	R	859
Non-contact	NC	2
Other	O	0
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		5,970
AAPOR RR1 = $I / (I+P+R+NC+O+UH+UO)$		86%

Cumulative response rate	Total
Weighted response rate to recruitment surveys	12%
% of recruitment survey respondents who agreed to join the panel, among those invited	72%
% of those agreeing to join who were active panelists at start of Wave 87	57%
Response rate to Wave 87 survey	86%
Cumulative response rate	4%

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