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 from Nov. 1 to Nov. 7, 2021. A total of 10,260 panelists responded out of 11,492 who were sampled, for a response rate of 89%. 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 10,260 respondents is plus or minus 1.6 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

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	1,603
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	939
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	470
Aug. 8 to Oct. 31, 2018	ABS	9,396	8,778	4,432
Aug. 19 to Nov. 30, 2019	ABS	5,900	4,720	1,625
June 1 to July 19, 2020; Feb. 10 to March 31, 2021	ABS	3,197	2,812	1,698
May 29 to July 7, 2021	ABS	1,085	947	725
Total		**39,296**	**27,199**	**11,492**

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. The 2021 recruitment survey was ongoing at the time this survey was conducted. The counts reflect completed recruitment interviews up through July 7, 2021.

PEW RESEARCH CENTER

address-based recruitment. Invitations were sent to a stratified, random sample of households selected from the U.S. Postal Service's Delivery Sequence File. Sampled households receive mailings asking a randomly selected adult to complete a survey online. A question at the end of the survey asks if the respondent is willing to join the ATP. Starting in 2020 another stage was added to the recruitment. Households that do not respond to the online survey are sent a paper version of the questionnaire, $5 and a postage-paid return envelope. A subset of the adults returning the paper version of the survey are invited to join the ATP. This subset of adults receive a follow-up mailing with a $10 pre-incentive and invitation to join the ATP.

Across the four address-based recruitments, a total of 19,578 adults were invited to join the ATP, of whom 17,257 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 27,199 individuals who have ever joined the ATP, 11,492 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.

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 that 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

---

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

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 Nov. 1 to Nov. 7, 2021. Postcard notifications were mailed to all ATP panelists with a known residential address on Nov. 1.

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 Nov. 1, 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 Nov. 2.

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	Nov. 1, 2021	Nov. 2, 2021
First reminder	Nov. 4, 2021	Nov. 4, 2021
Final reminder	Nov. 6, 2021	Nov. 6, 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, 19 ATP respondents were removed from the survey dataset prior to weighting and analysis.

Weighting

The ATP data is 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. 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 and then calibrated to align with the population benchmarks in the accompanying table to correct for nonresponse to recruitment surveys and panel attrition. If only a subsample of panelists was invited to participate in the wave, this weight is adjusted to account for any differential probabilities of selection.

Weighting dimensions

Variable	Benchmark source
Age x Gender	2019 American Community Survey (ACS)
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	2020 CPS March Supplement
Volunteerism	2019 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation	2021 National Public Opinion Reference Survey (NPORS)
Frequency of internet use	
Religious affiliation	

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 U.S. adult population.

PEW RESEARCH CENTER

Among the panelists who completed the survey, this weight is then calibrated again to align with the population benchmarks identified in the accompanying table and trimmed at the 1st and 99th percentiles to reduce the loss in precision stemming from variance in the weights. Sampling errors and tests of statistical significance take into account the effect of weighting.

Some of the population benchmarks used for weighting come from surveys conducted prior to the coronavirus outbreak that began in February 2020. However, the weighting variables for panelists recruited in 2021 were measured at the time they were recruited to the panel. Likewise, the profile variables for existing panelists were updated from panel surveys conducted in July or August 2021.

This does not pose a problem for most of the variables used in the weighting, which are quite stable at both the population and individual levels. However, volunteerism may have changed over the intervening period in ways that made their 2021 measurements incompatible with the

available (pre-pandemic) benchmarks. To address this, volunteerism is weighted using the profile variables that were measured in 2020. For all other weighting dimensions, the more recent panelist measurements from 2021 are used.

For panelists recruited in 2021, plausible values were imputed using the 2020 volunteerism values from existing panelists with similar characteristics. This ensures that any patterns of change that were observed in the existing panelists were also reflected in the new recruits when the weighting was performed.

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	10,260	1.6 percentage points
Form 1	5,153	2.3 percentage points
White, non-Hispanic	3,601	2.6 percentage points
Black, non-Hispanic	407	7.2 percentage points
Hispanic	734	7.1 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	10,260
Logged onto survey; broke off	2.12	112
Logged onto survey; did not complete any items	2.1121	193
Never logged on (implicit refusal)	2.11	906
Survey completed after close of the field period	2.27	2
Completed interview but was removed for data quality		19
Screened out		0
Total panelists in the survey		**11,492**
Completed interviews	I	10,260
Partial interviews	P	0
Refusals	R	1,230
Non-contact	NC	2
Other	O	0
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		**11,492**
AAPOR RR1 = I / (I+P+R+NC+O+UH+UO)		89%

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 99	42%
Response rate to Wave 99 survey	89%
Cumulative response rate	**3%**

© Pew Research Center, 2022

Topline

2021 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
WAVE 99 – INTERNET & SCIENCE
TOPLINE
NOVEMBER 1-7, 2021
N=10,260

THE QUESTIONS PRESENTED BELOW ARE PART OF A LARGER SURVEY CONDUCTED ON THE AMERICAN TRENDS PANEL. OTHER QUESTIONS ON THIS SURVEY HAVE BEEN PREVIOUSLY RELEASED.

NOTE: ALL NUMBERS ARE PERCENTAGES UNLESS OTHERWISE NOTED. THE PERCENTAGES LESS THAN 0.5% ARE REPLACED BY AN ASTERISK (*). ROWS/COLUMNS MAY NOT TOTAL 100% DUE TO ROUNDING.

	Sample size	**Margin of error at 95% confidence level**
U.S. adults	10,260	+/- 1.6 percentage points

[PROGRAMMING NOTE: ASK BLOCKS 1-3 IF FORM 1; RANDOMIZE ORDER OF BLOCKS]

BLOCK 2

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:
FACERECVIG   Facial recognition technology can identify someone by scanning their face in photos, videos or in real time. This technology could be used by police to look for people who may have committed a crime or monitor crowds in public spaces.

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:
FACEREC2   Do you think the widespread use of facial recognition technology by police would be a…

Nov 1-7, 2021
46	Good idea for society
27	Bad idea for society
27	Not sure
*	No answer

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:

FACEREC3   If the use of facial recognition technology by police becomes widespread, do you think each of the following would happen? The police would… **[RANDOMIZE ITEMS]**

		Definitely would happen	Probably would happen	Probably would NOT happen	Definitely would NOT happen	No answer
a.	Make more false arrests					
	Nov 1-7, 2021	16	38	40	5	2
b.	Solve crimes more quickly and efficiently					
	Nov 1-7, 2021	18	55	21	4	1
c.	Use the technology to monitor Black and Hispanic neighborhoods much more often than other neighborhoods					
	Nov 1-7, 2021	26	40	24	8	2
d.	Find more missing persons					
	Nov 1-7, 2021	21	57	18	2	1
e.	Be able to track everyone's location at all times					
	Nov 1-7, 2021	27	42	24	6	1
f.	Be better able to keep crowds under control					
	Nov 1-7, 2021	12	37	43	7	1

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:

FACEREC4   Do you think the widespread use of facial recognition technology by police will make policing… **[RANDOMIZE RESPONSE OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]**

Nov 1-7, 2021
34	More fair
25	Less fair
40	Not make much difference
1	No answer

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:

FACEREC8   Would the use of facial recognition technology by police be more acceptable, less acceptable or would it make no difference if… **[RANDOMIZE ITEMS]**

		More acceptable	Less acceptable	No difference	No answer
a.	People without criminal records could opt-out of facial recognition databases				
	Nov 1-7, 2021	45	26	28	2
b.	People were notified of the public events and public spaces that were scanned for facial images				
	Nov 1-7, 2021	53	18	28	2
c.	Police officers were trained in how facial recognition systems can make errors in identifying people before they use it				
	Nov 1-7, 2021	64	11	23	1

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:
FACEREC10   If a facial recognition program said that someone was involved in a crime, should that be good enough evidence for police to arrest them, even if there was a small chance the program was wrong?

Nov 1-7, 2021
27	Yes
70	No
2	No answer

ASK FORM 1 ONLY [XFORM=1] [N=5,153]:
FACEREC11   Would you consider each of the following uses of facial recognition technology by police to be acceptable or not acceptable? Scanning people … **[RANDOMIZE ITEMS]**

		Acceptable	Not acceptable	No answer
a.	At public protests			
	Nov 1-7, 2021	61	38	1
b.	As they enter large events like concerts to see who is in the crowd			
	Nov 1-7, 2021	63	36	1
c.	As they walk down the street			
	Nov 1-7, 2021	31	68	1