# Pew Research Center's American Trends Panel Wave 74 Methodology Report

Submitted to: Pew Research Center

Date submitted: September 16, 2020

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# **Summary**

The American Trends Panel (ATP) is a national, probability-based online panel of adults living in households in the United States. On behalf of the Pew Research Center, Ipsos Public Affairs ("Ipsos") conducted the Wave 74 survey of the panel from September 8, 2020 to September 13, 2020. In total, 10,093 ATP members (both English- and Spanish-language survey-takers) completed the Wave 74 survey. Survey weights were provided for the total responding sample. The margin of sampling error for weighted estimates based on the full sample is ±1.6 percentage points.

# **Sample Definition**

The overall target population for Wave 74 was non-institutionalized persons age 18 and over, living in the US, including Alaska and Hawaii. The sample consisted of 11,506 ATP members that were still active.

# **Questionnaire Development and Testing**

The questionnaire was developed by the 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. The Pew Research Center has a copy of the final instruments in English and Spanish.

## Recruitment and Administration of the ATP

Prior to Wave 74, ATP panelists were recruited from three large (n=10,013, n=6,004 and n=3,905), national, overlapping, dual-frame landline and cellphone random-digit-dial (RDD) surveys and three (n=9,396, n=5,900 and n=1,862) national address-based sample (ABS) surveys conducted for the Pew Research Center. At the end of each recruitment survey, respondents were invited to join the panel. The first recruitment was conducted from January 23 to March 16, 2014, the second recruitment was conducted from August 27 to October 4, 2015, the third recruitment was conducted from April 25 to June 4, 2017, the fourth recruitment was conducted from August 8, 2018 to October 31, 2018, the fifth recruitment was conducted August 19, 2019 to November 30, 2019, and the sixth recruitment was conducted June 1 to August 18, 2020 all in English and Spanish. Sample for the RDD surveys was obtained from SSI and sample for the ABS survey was obtained by MSG. The RDD recruitment surveys were conducted by Abt SRBI.¹ 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.² The

<sup>&</sup>lt;sup>1</sup> Visit <a href="http://www.pewresearch.org/methodology/u-s-survey-research/american-trends-panel/">http://www.pewresearch.org/methodology/u-s-survey-research/american-trends-panel/</a> for more information on American Trends Panel recruitment and methodology.

<sup>&</sup>lt;sup>2</sup> AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

American Trends Panel never uses breakout routers or chains that direct respondents to additional surveys.

The first 20 waves of the ATP featured a simultaneous mixed-mode design, in which panelists who used the Internet and provided an email address participated via self-administered web survey, and adults who did not use the Internet (or did but did not provide an email address) participated via a mail survey (Waves 3-4 and 6-20) or computer-assisted telephone interviewing (CATI, Waves 1 and 5 only). Wave 18 was the first wave where a subset of the non-Internet panelists was converted to web mode. The conversion process involved calling all active mail mode respondents (n=616) and asking them to report their Internet and device status and then asking them to convert to web. Those who already had the means for taking web surveys were simply asked to convert. Those without the means for taking web surveys (no device and/or Internet access) were offered an Internet-connected tablet computer at no cost to the panelist. Tablets were shipped to the panelists who accepted, and they were given a follow-up call to ensure they understood how to use the tablet to access the ATP surveys through a pre-installed Mobile Panel Application.

Wave 21 was the first wave conducted only in web mode. However, the conversion effort was ongoing through Wave 26. By Wave 26, 238 of 616 (39%) mail panelists had converted to web. Of these, 197 received tablets and 41 made the mode switch using their own devices.

## **Data Collection Protocol**

The data collection field period for Wave 74 was September 8, 2020 to September 13, 2020. Postcard notifications were mailed to all ATP panelists with a known residential address on September 9, 2020.

On September 8 and September 9 invitations to Wave 74 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 September 8, 2020. 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 panelists were included in the full launch and were sent an invitation on September 9, 2020.

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 for Wave 74 Panelists**

|                          | Soft Launch        | Full Launch        |
|--------------------------|--------------------|--------------------|
| Initial invitation       | September 8, 2020  | September 9, 2020  |
| 1 <sup>st</sup> reminder | September 11, 2020 | September 11, 2020 |
| Final reminder           | September 12, 2020 | September 12, 2020 |

ATP panelists who completed their survey in Spanish and all converted panelists who had received a tablet were offered a \$20 post-paid incentive for completing the Wave 74 survey. Panelists who were age 18-29, African American, with high school education or less, were not registered to vote, or reported being Hispanic but taking the survey in English in the RDD recruitment survey were offered a \$10 post-paid incentive for completing the Wave 74 survey. All other panelists who completed the survey were offered a \$5 post-paid incentive. 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. The differential incentive amounts were designed to increase panel survey participation among groups that traditionally have low survey response propensities.

# **Data Quality Checks**

As part of the effort to ensure the highest quality data, the Pew Research Center researchers performed data quality checks to identify any respondents showing clear patterns of satisficing. Pew Research Center removed three ATP respondents from the Wave 74 data, and none were withdrawn from the panel completely.

# Weighting

Survey weights are needed to support reliable inference from the panel to the target population of US adults. The final survey dataset contains a total sample weight variable (WEIGHT W74). The design of this weight is described below.

Starting with the base weights of ATP sample, respondents are weighted to represent the ages 18+ population with respect to the following characteristics:

- Gender (Male, Female) x Age (18-24, 25-34, 35-44, 45-54, 55-64, 65+)
- Gender (Male, Female) x Education (HS grad or less, Some college, College grad +)
- Age (18-34, 35-54, 55+) x Education (HS grad or less, Some college, College grad +)
- Race/Ethnicity (White Non-Hispanic, Black Non-Hispanic, Hispanic, Asian Non-Hispanic, Other/Multi-race Non- Hispanic) by Education (HS grad or less, Some college, College grad +) and education is not broken out (but collapse) within Other/Multi-race Non-Hispanic]

- Census Region (Northeast, Midwest, South, West) by Metropolitan Status (Metro, Nonmetro)
- Party ID (Republican, Democrat, Independent/Other/DK/REF)
- Volunteerism (Volunteered, Did not Volunteer)
- Registered Voter (Yes, No)
- Race/Ethnicity by Place of Birth (White Non-Hispanic, Black Non-Hispanic, Hispanic born in U.S. (not including unincorporated territories), Hispanic born in Mexico, Hispanic born elsewhere, Asian non-Hispanic born in U.S. (not including unincorporated territories), Asian non-Hispanic born elsewhere, Other/Multi-race Non-Hispanic)
- Years in U.S. (Born in U.S. (not including unincorporated territories), 0-10 years, 11-20 years, 20+ years)
- Frequency of internet use (Almost constantly, Several times a day, Daily or several times a week, Less often or doesn't use internet)
- Religious affiliation (Protestant, Catholic, Unaffiliated, Other)

The weighting benchmarks are provided by Pew Research Center. Weights are trimmed and scaled to sum to the un-weighted sample size of total respondents.

## Weights Definition:

WEIGHT\_ W74: Wave 74 ATP cases (trimmed weights)

## **Trimming:**

(1%, 99%)

## **Approximate Design Effect:**

|         | WEIGHT_W74 |
|---------|------------|
| Overall | 2.56       |

## **Base Weight**

The ATP data was weighted in a multistep process that begins by calibrating the entire panel so that it aligns 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.

#### **Calibration to Target Population Controls**

In the final stage of weighting, the ATP base weights for the panelists responding to a particular panel survey are calibrated to population benchmarks using raking, or iterative proportional

fitting. This adjustment is designed to reduce the risk of nonresponse bias stemming from nonresponse at the various stages of the panel design. The raking dimensions and the source for the population parameter estimates are reported in the table below. All raking targets are based on the non-institutionalized U.S. adult (age 18+) population.

**Raking Dimensions and Source for Population Parameter Estimates** 

| Raking Dimension^                    | Source  |
|--------------------------------------|---|
| Gender(2) x Age(6)                   | 2018 American Community Survey  |
| Gender(2) x Education (3)            | 2018 American Community Survey  |
| Age(3) x Education(3)                | 2018 American Community Survey  |
| Education(3) x Race/Ethnicity(5)*    | 2018 American Community Survey  |
| Census Region(4) by Metro Status(2)  | 2019 Current Population Survey ASEC March Supplement  |
| Party Affiliation(3)                 | Average from the three most recent monthly surveys conducted for the Pew Research Center for the People & the Press |
| Volunteerism(2)                      | 2017 CPS Volunteering and Civic Life Supplement   |
| Registration(2)                      | 2018 Current Population Survey Registration Supplement  |
| Place of Birth by Race/Ethnicity (7) | 2018 American Community Survey  |
| Years in U.S. (4)                    | 2018 American Community Survey  |
| Frequency of internet use (4)        | 2020 National Public Opinion Reference Survey (NPORS)   |
| Religious affiliation (4)            | 2020 National Public Opinion Reference Survey (NPORS)   |

<sup>^</sup> The numbers of categories (prior to any collapsing from small cell size) are shown in parentheses.

The raking for internet usage was included in the algorithm so that the panel survey estimates reflect the target population with respect to the proportion of people who use the internet and the proportion who do not. In Wave 74, all ATP interviews were completed via selfadministered web survey. Therefore, there was a concern that internet users could be over-

<sup>\*</sup> Note that Education is collapsed for "Other/Non Hispanic"

represented in the survey estimates if this dimension was not controlled for in the raking. To correct for this potential over-representation, panelists who reported at the time of the recruitment survey that they did not use the Internet were used to represent non-Internet users in the raking.

# **Design Effect and Margin of Error**

Weighting and survey design features that depart from simple random sampling tend to result in an increase in the variance of survey estimates. This increase, known as the design effect or deff, should be incorporated into the margin of error, standard errors, and tests of statistical significance. The overall design effect for a survey is commonly approximated as 1 plus the squared coefficient of variation of the weights. For this survey, the margin of error (half-width of the 95% confidence interval) incorporating the design effect for full sample estimates at 50% is  $\pm 1.6$  percentage points. Estimates based on subgroups will have larger margins of error. It is important to remember that random sampling error is only one possible source of error in a survey estimate. Other sources, such as question wording and reporting inaccuracy, may contribute additional error. A summary of the weights and their associated design effect is reported in the table below.

## **Design Effect and Effective Sample Size**

| Weight<br>Variable | Completed<br>Interviews | Approximate Design Effect | Effective<br>Sample Size | Margin of Error<br>(95% confidence<br>level) |
|--------------------|-------------------------|---------------------------|--------------------------|--|
| WEIGHT_W74         | 10,093                  | 2.56                      | 3,947                    | ± 1.6 percentage points                      |

## **Dispositions**

The survey cooperation rate for Wave 74 itself was 88%. The final table reports the cumulative response rate for Wave 74 when all stages of recruitment or response are taken into account.

#### Final Dispositions for the Wave 74 Web Survey

| Final Disposition                                    | AAPOR<br>Code <sup>1</sup> | АТР    |
|--|----------------------------|--------|
| Completed interview                                  | 1.1                        | 10,093 |
| Logged onto survey; broke-off                        | 2.12                       | 175    |
| Logged onto survey; did not complete any items       | 2.1121                     | 55     |
| Never logged on (implicit refusal)                   | 2.11                       | 1,114  |
| Survey Completed after close of the field period     | 2.27                       | 66     |
| Completed interview but was removed for data quality |                            | 3      |
| Screened out   |                            | N/A    |

| Total Panelists in the Wave 74 Web Survey |    | 11,506 |
|---|----|--------|
| Completed interviews                      | I  | 10,093 |
| Partial interviews                        | Р  |        |
| Refusals                                  | R  | 1347   |
| Non-contact                               | NC | 66     |
| Other                                     | 0  |        |
| Unknown household                         | UH |        |
| Unknown other                             | UO |        |
| Not eligible                              | NE | N/A    |
| Total                                     |    | 11,506 |
| AAPOR RR1 = I / (I+P+R+NC+O+UH+UO)        |    | 88%    |

| Cumulative Response Rate  | ATP |
|---|-----|
| Weighted Response Rate to Recruitment Surveys <sup>^</sup>                                  | 12% |
| Percent of Recruitment Survey Respondents Who Agreed to Join the panel, Among Those Invited | 73% |
| Percent of Those Agreeing to Join Who Were Active Panelists at Start of Wave 74             | 65% |
| Response Rate to Wave 74 Survey   | 88% |
| Cumulative Response Rate for the Wave 74 Survey   | 5%  |

<sup>^</sup> Weighted by the total phone numbers used in each survey