

Institutions of Democracy National Panel

Methods Report

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Overview

The Annenberg Public Policy Center engaged SSRS to conduct the Democracy Study National Panel via a custom-recruited panel of non-institutionalized U.S. citizens aged 18 or older.

Sample Design: APPC National Panel

APPC National Panel members were recruited based on a probabilistic address-based sample (ABS) of U.S. households. SSRS implemented a stratified design to ensure adequate representation of key subpopulations:

- Adults with LT High School Education
- Hispanic and African American Adults
- Spanish Speakers
- Republicans (particularly Trump-supporting Republicans)
- Adults aged 18-24

The recruitment strata were defined by the cross of geographic strata and modeled strata:

- Geographic strata
 - Northeast
 - Midwest
 - South Atlantic
 - South-Other
 - West
- Modeled Strata: Addresses predicted to include members of the following populations
 - Likely Spanish Speaking
 - Likely LTHS
 - Likely Hispanic
 - Likely African American
 - Likely Conservative Republican
 - Likely Moderate Republican
 - Residual Matched
 - Unmatched, Likely LTHS
 - Residual Unmatched

Approximately 19% more panelists than needed were recruited to the panel. 2,678 panelists were initially invited to complete wave 26, while 1,617 panelists completed the wave. Those who did not complete wave 26 will not be included in future waves, with the exception of LTHS newly recruited panelists.

Questionnaire Design

The questionnaire was developed by APPC in consultation with the SSRS project team. SSRS reviewed the questionnaire primarily to identify potential problems in the instrument that might increase respondent burden, cause respondents to refuse or terminate the survey, create

problems with respondent comprehension, or pose practical challenges for mode-specific administration such as complex skip patterns.

Data Collection

Screening

Only current APPC Democracy Study National panelists were invited to complete the survey. Web panelists received a unique link via email and SMS. Phone panelists were called at the phone number they provided. Interviewers asked for the specific panelist by name, and if the named person was unavailable, they asked for the individual who joined the Annenberg Democracy Study Panel. The only screening criteria implemented was if the person that was reached was a member of the Annenberg Democracy Study.

Web Contact Procedures

A “soft launch” inviting a limited number of panelists to participate was conducted on May 1, May 8, and May 15, 2024 (the first field date of each replicate). Soft launch data were checked to ensure the functionality of the program and that the administration length of the survey was within the scope of work. After checking soft launch data to ensure that all questionnaire content and skip patterns were correct, additional sample was released to ensure the final sample met the study goals.

Web panelists were emailed an invitation to complete the survey online. The email for each respondent included a unique password-embedded link. All panelists who did not respond to the email invitation received up to six reminder emails, and panelists who had opted to receive text messages from the APPC National Panel received up to five text message reminders.

In appreciation for their participation, web panelists received post-paid compensation in the form of an electronic gift card, sent via email immediately after completion of the survey, and phone panelists received a mailed check. Panelists with a high school or less education were offered a larger compensation to encourage participation.

The median web survey length was approximately 24 minutes.

Phone Contact Procedures

Interviewers asked to speak with the person at that number who is a member of the Annenberg Democracy Study Panel by name. Interviewers verified that the person was on the phone and in a safe place before administering the survey. All interviews were completed in English or Spanish. The CATI system ensured that complete dispositions of all call attempts were recorded.

CATI interviewers received written materials about the survey instrument and received formal training for this particular project. The written materials were provided prior to commencement

of data collection and included an annotated questionnaire that contained information about the goals of the study, detailed explanations about why questions were being asked, the meaning and pronunciation of key terms or names, potential obstacles to overcome in getting good answers to questions, and respondent problems that could be anticipated ahead of time, as well as strategies for addressing the potential problems.

To maximize survey response, SSRS enacted the following procedures during the field period:

- As many as five (5) attempts were made to contact every sampled telephone number for the national panel.
- Calls were staggered over times of day and days of the week to maximize the chance of reaching potential respondents. At least one daytime call was conducted if necessary.
- Interviewers explained the purpose of the study and its importance.
- Respondents were offered the option of scheduling a call-back at their convenience.
- Specially trained interviewers contacted numbers where the initial call resulted in respondents hanging up the phone.

All respondents who completed the survey were offered post-paid compensation via a mailed check.

The median phone survey length was approximately 41 minutes.

Programming, Data Processing, and Integration

Programming

Prior to the field period, SSRS programmed the study into its Forsta Plus (formerly known as Confirmit) Web/CATI platform for administration in English and Spanish. Extensive checking of the program was conducted to ensure that skip patterns and sample splits followed the design of the questionnaire.

Additional steps were employed to ensure a quality experience in survey administration regardless of the device utilized by respondents, whether a desktop computer, tablet, or mobile phone. The web program was optimized for administration via smartphone or other mobile handheld devices. The web program was also checked on multiple devices, including desktop computers and handheld mobile devices, as well as different web browsers to ensure consistent and optimized visualization across devices and web browsers. The web survey was accessed directly by respondents, using their unique survey links with embedded passwords. This also gave them the ability to return to their survey later if they chose to suspend it.

Quality Control Checks

For web surveys, quality checks were incorporated into the survey. For the Democracy Study National Panel, respondents who failed the quality checks were not included in the final data set.

This included:

1. Terminate speeder if finishing in 20% or less of median (to be set after soft launch). (n=2);
2. Completion rate failures (web/phone: answer less than 70% of the questions they were asked) who are allowed to complete the survey but should not count towards completes. (n=0);
3. DQFail (trap question failures) who are allowed to complete the survey but should not count towards completes. (n=0).

A total of n=2 completed surveys were removed after applying these cleaning standards (0.1%).

For telephone surveys, interviews were closely monitored by interviewing staff for quality control. In addition, select recordings were reviewed by supervisors to monitor quality and interviewer procedures.

Weighting and Design Effects

Weighting Strategy

The data were weighted to represent non-institutionalized U.S. citizens aged 18+. This was achieved by applying a base weight and balancing the demographic profile of the sample to target population parameters.

Base Weight

Initial Base Weight

- The base weight for this sample was created using the following steps:
 1. Every sampled case received a design weight to account for the probability of selection from the sample design strata (i.e. the estimated number of addresses in the stratum/the number selected from the stratum)
 2. For the national study, respondents completed the registration survey prior to being asked if they would like to join the panel. Therefore, survey respondents were classified into one of three response statuses: (1: Panel Joiner; 2: Registration Survey complete, but non-joiner; 3: Non-complete).
 3. The design weight was adjusted for nonresponse to the registration survey within cells defined by REGION x MODELED STRATA. The nonresponse adjustment was computed by dividing the design weight by the response rate within the nonresponse adjustment cell.
 4. Next, we further adjusted this weight by computing a “Join Propensity” adjustment for all the panel joiners using variables from the registration survey. This was done through a response propensity model with an indicator of whether the person agreed to join the panel as the dependent variable and the following as independent variables:
 - Region
 - Strata
 - Sex
 - Age
 - Education
 - Race/Ethnicity
 - Civic engagement
 - Internet use frequency
 - Voter registration status
 - Party ID, 2020 vote choice (with a category for no vote)
 - 2024 vote preference
 - Ideology
 5. Lastly, the Joined sample was raked to the following demographics using the adjusted base weight described above:
 - Sex by Age
 - Sex by Education
 - Age by Education
 - Race/Ethnicity
 - Region
 - Civic engagement
 - Population density
 - Internet use frequency

- Voter registration status
6. The subsample of cases to be fielded in W1 was selected proportionate to the size of the final raked weight, with cases having certain characteristics sampled with near certainty. These characteristics included:
 - High School or less
 - Black, Hispanic, or Asian
 - Age 18-24
 - PID (leaned) = Republican
 - vote = Trump OR 2024 likely vote = TRUMP
 - Did not vote in 2020
 7. The subsample selection probability was calculated via bootstrapping the sample selection. The final base weight to be used in W1 was created by dividing the adjusted base weight from step 5 by the bootstrapped subsample selection probability.

Wave 1 Completed Sample Propensity Adjustment

Because the number of wave 1 completes was lower than anticipated, a propensity adjustment was made to account for the difference in wave 1 completes versus the entire sample. The outcome of interest for the propensity adjustment was based on whether the invited sample completed wave 1. Predictor variables for the propensity adjustment model were derived from the Panel Registration Survey. Candidate models were developed using the Step function from the Stats package in R.¹ The Step function builds a logistic regression model using the Akaike information criterion in a stepwise algorithm. All three algorithm directions were used (Forward, Backward, and Both). Candidate models were evaluated on their design effect when computed as the propensity adjustment further described below and multiplied by the initial base weight. Additionally, the candidate model's ability to discriminate whether invited sample completed wave 26 was also evaluated. The final logistic regression model can be written as:

$$\log \frac{P(\text{Completed} = 0)}{P(\text{Completed} = 1)} = \beta_0 + \beta_1 * X_{fair20} + \beta_2 * X_{dmideo} + \beta_3 * X_{race} + \beta_4 * X_{income24} + \beta_5 * X_{intfreq}$$

The reciprocal of the predicted probabilities derived from the logistic regression model were used to compute the propensity adjustment such that:

$$PA = 1/pre_1.$$

Final Base Weight

The final base weight is the product of the initial base weight, and the wave 26 completed sample propensity adjustment:

$$d0_{FINAL} = d0 \times PA$$

The final base weight was standardized overall, to sum to the number of completed interviews.

¹ R Core Team (2024). *R: A Language and Environment for Statistical Computing*. R Foundation for Statistical Computing, Vienna, Austria. <<https://www.R-project.org/>>

Calibration

With the base weight applied, the data were weighted to balance the demographic profile of the sample to the target population parameters of citizens aged 18+.

Missing data in the raking variables was imputed using hot decking. Hot deck imputation replaces the missing values of a respondent randomly with another similar respondent without missing data. Hot decking was done using an SPSS macro detailed in ‘Goodbye, Listwise Deletion: Presenting Hot Deck Imputation as an Easy and Effective Tool for Handling Missing Data’ (Myers, 2011).

Weighting was accomplished using the R package ANESRAKE.²

The weights were then trimmed at the 2nd and 98th percentiles, to ensure that individual respondents do not have too much influence on survey-derived estimates. After the weights were trimmed, the weights were standardized overall to sum to the total number of completed interviews.

Table 2 lists the variables that were used in the calibration of the weights and their source.

Table 2. Calibration Variables and Source

DIMENSIONS	SOURCE
Sex	2023 Current Population Survey ³
Age	
Education	
Race	
Hispanic nativity	
Census region	
Home tenure	
Number of adults per household	
Population density	Claritas Pop-Facts Premier 2023 ⁴
Civic engagement	September 2021 CPS Volunteering and Civic Life Supplement ⁵
Voter registration	CPS Voter Supplement 2022 ⁶
2020 recalled vote by county quintile	Certified Election Results

² <https://cran.r-project.org/web/packages/anesrake/anesrake.pdf>

³ Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles, J. Robert Warren, Daniel Backman, Annie Chen, Grace Cooper, Stephanie Richards, Megan Schouweiler and Michael Westberry. IPUMS CPS: Version 11.0 [dataset]. Minneapolis, MN: IPUMS, 2023. <https://doi.org/10.18128/D030.V11.0>

⁴ <https://environicsanalytics.com/data/demographic/pop-facts-premier>

⁵ <https://www.census.gov/programs-surveys/cps/about/supplemental-surveys.html>

⁶ Sarah Flood, Miriam King, Renae Rodgers, Steven Ruggles and J. Robert Warren. Integrated Public Use Microdata Series, Current Population Survey: Version 7.0 [dataset]. Minneapolis, MN: IPUMS, 2020. <https://doi.org/10.18128/D030.V7.0>

The following table (Table 3) compares unweighted and weighted sample distributions to target population benchmark distributions.

Table 3. Sample Demographics

CATEGORY	VALUES	PARAMETER	UNWEIGHTED	WEIGHTED
Education	Less Than High School	7.44%	4.1%	6.4%
	High School	28.92%	15.5%	27.0%
	Some College	27.71%	28.6%	28.9%
	College+	35.93%	51.8%	37.7%
Race	White non-Hispanic	66.04%	69.1%	67.4%
	Black non-Hispanic	12.58%	10.5%	11.8%
	Hispanic US Born	9.24%	12.5%	9.4%
	Hispanic Foreign Born	4.25%	1.7%	4.0%
	Asian non-Hispanic	5.15%	2.8%	4.6%
	Other non-Hispanic	2.75%	3.3%	2.9%
Density	1 Lowest	20.0%	18.3%	19.4%
	2	20.0%	21.1%	19.8%
	3	20.0%	22.3%	20.4%
	4	20.0%	20.1%	20.4%
	5 Highest	20.0%	18.1%	20.0%
Region	Northeast	17.28%	15.9%	17.5%
	Mid-West	21.40%	22.0%	21.6%
	South	38.53%	42.0%	38.1%
	West	22.79%	20.1%	22.8%
Voter Registration	Registered to vote	83.8%	78.1%	83.3%
	Not Registered/Don't Know/Refused	16.2%	21.9%	16.7%
Adults in Household	1	17.67%	22.0%	17.5%
	2	53.10%	38.5%	52.7%
	3 3+	29.22%	39.4%	29.8%
Gender By Age	Male 18-24	6.04%	3.1%	5.4%
	Male 25-34	8.45%	7.1%	8.9%
	Male 35-44	7.95%	7.8%	7.6%
	Male 45-54	7.43%	7.1%	7.8%
	Male 55-64	7.97%	7.2%	7.9%
	Male 65+	10.81%	11.7%	10.6%
	Female 18-24	5.95%	5.7%	5.9%
	Female 25-34	8.42%	11.2%	8.7%
	Female 35-44	8.00%	11.2%	8.4%

	Female 45-54	7.63%	9.1%	7.5%
	Female 55-64	8.41%	7.5%	8.3%
	Female 65+	12.94%	11.4%	13.1%
Gender By Education	Male HS or Less	18.99%	7.3%	17.0%
	Male Some College	13.00%	12.1%	13.7%
	Male College+	16.65%	24.6%	17.5%
	Female HS or Less	17.36%	12.3%	16.4%
	Female Some College	14.71%	16.5%	15.3%
	Female College+	19.27%	27.2%	20.2%
	Age by Education	18-34 HS or Less	11.09%	8.1%
18-34 Some College		9.06%	7.4%	9.3%
18-34 College+		8.72%	11.5%	9.1%
35-54 HS or Less		9.38%	5.6%	8.6%
35-54 Some College		8.06%	10.3%	8.5%
35-54 College+		13.57%	19.3%	14.3%
55+ HS or Less		15.89%	5.9%	14.4%
55+ Some College		10.60%	10.9%	11.1%
55+ College+		13.63%	21.0%	14.3%
RECALLED VOTE BY QUINTILE	1- Biden	3.93%	4.0%	3.8%
	1-Trump	10.40%	8.6%	10.2%
	1- Other	0.25%	0.5%	0.3%
	2- Biden	6.32%	7.3%	6.3%
	2-Trump	8.28%	6.4%	7.8%
	2-Other	0.28%	0.5%	0.3%
	3- Biden	7.60%	7.2%	8.0%
	3-Trump	6.51%	5.9%	6.7%
	3-Other	0.26%	0.4%	0.3%
	4-Biden	8.64%	9.0%	8.9%
	4-Trump	5.37%	4.1%	5.3%
	4-Other	0.28%	0.2%	0.3%
	5-Biden	10.80%	12.0%	11.2%
	5-Trump	3.49%	2.7%	3.2%
	5-Other	0.27%	0.4%	0.3%
	Did not vote	27.30%	30.8%	27.0%

Design Effect and Margin of Sampling Error

Specialized sampling designs and post-data collection statistical adjustments require analysis procedures that reflect departures from simple random sampling. SSRS calculates the effects of these design features so that an appropriate adjustment can be incorporated into tests of statistical significance when using these data. The so-called "design effect" or *deff* represents the loss in statistical efficiency that results from a disproportionate sample design and systematic non-response. SSRS calculates the composite design effect for a sample of size n , with each case having a weight, w as⁷:

$$deff = \frac{n \sum w^2}{(\sum w)^2}$$

The survey's margin of error is the largest 95% confidence interval for any estimated proportion based on the total sample—one around 50%. For example, the margin of error for first wave of the survey is ± 3.3 percentage points. This means that in 95 out of every 100 samples using the same methodology, estimated proportions based on the entire sample will be no more than 3.3 percentage points away from their true values in the population.

It is important to remember that sampling fluctuations are only one possible source of error in a survey estimate. Other sources, such as measurement error, may contribute additional error of greater or lesser magnitude. Table 4 shows the design effect, sample size, and margin of error for the sample overall.

Table 4. Same Sizes, Design Effects and Margins of Sampling Error

	N =	DESIGN EFFECT	MARGIN OF ERROR
Final Trimmed 2% Weight	1,620	1.85	+/- 3.3 percentage points

⁷ Kish, L. (1992). Weighting for Unequal Pi. *Journal of Official Statistics*, Vol. 8, No.2, 1992, pp. 183-200.

Sample Disposition and Response Rate At First Wave

Table 5 details the completion and response rates for this study.

Table 5: Completion Rate/Response Rate:

Completion Rates/Composite Response Rates	Total
Total Sample (Invited to participate)	2678
Screen-outs	0
Total Eligible	2678
Quality control removals	2
Incompletes	1055
Quota full	0
Completions*	1620
Survey Completion rate (Completions/Total invited to participate)	60%
<i>*Excludes screen-outs or data quality removals that completed the survey</i>	

Deliverables

Final deliverables for this study were as follows:

- Final weighted SPSS
- Methods report