Methodology

The analysis in this report is based on a self-administered web survey conducted from April 14 to May 4, 2022, among a sample of 1,316 U.S. teenagers ages 13 to 17. The margin of sampling error for the full sample of 1,316 teens is plus or minus 3.2 percentage points. The survey was conducted by Ipsos Public Affairs in English and Spanish using KnowledgePanel, its nationally representative online research panel.

KnowledgePanel members are recruited through probability sampling methods and include both those with internet access and those who did not have internet access at the time of their recruitment. KnowledgePanel provides internet access for those who do not have it and, if needed, a device to access the internet when they join the panel. KnowledgePanel's recruitment process was originally based exclusively on a national random-digit-dialing (RDD) sampling methodology. In 2009, Ipsos migrated to an address-based sampling (ABS) recruitment methodology via the U.S. Postal Service's Delivery Sequence File (DSF). The 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

Panelists were eligible for participation in this survey if they indicated on an earlier profile survey that they were the parent of a teen ages 13 to 17. A random sample of 5,580 eligible panel members were invited to participate in the study. Responding parents were screened and considered qualified for the study if they reconfirmed that they were the parent of at least one child ages 13 to 17 and granted permission for their teen who was chosen to participate in the study. In households with more than one eligible teen, parents were asked to think about one randomly selected teen and that teen was instructed to complete the teen portion of the survey. A survey was considered complete if both the parent and selected teen completed their portions of the questionnaire, or if the parent did not qualify during the initial screening. The analysis in this report is based only on the data gathered from the teen portion of the sample.

Of the sampled panelists, 1,607 (excluding break-offs) responded to the invitation and 1,316 qualified, completed the parent portion of the survey, and had their selected teen complete the teen portion of the survey, yielding a final stage completion rate of 29% and a qualification rate of 82%. The cumulative response rate accounting for nonresponse to the recruitment surveys and

¹ AAPOR Task force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

² The 1,316 qualified and completed interviews exclude seven cases that were dropped because respondents did not answer one-third or more of the survey questions.

attrition is 1%. The break-off rate among those who logged on to the survey (regardless of whether they completed any items or qualified for the study) is 37%.

Upon completion, qualified respondents received a cash-equivalent incentive worth \$10 for completing the survey.

Panelists were assigned to take the survey in batches. Email invitations and reminders were sent to panelists according to a schedule based on when they were assigned this survey in their personalized member portal, shown in the table below. The field period was closed on May 4, 2022, and thus no further email contacts past the invitation were sent for the final set of panelists.

Invitation and reminder dates

	Panelists assigned April 14, 2022	Panelists assigned April 15, 2022	Panelists assigned April 29, 2022
Invitation	April 17, 2022	April 18, 2022	May 2, 2022
First reminder	April 20, 2022	April 21, 2022	
Second reminder	April 23, 2022	April 24, 2022	
Third reminder	April 26, 2022	April 27, 2022	

Weighting

The analysis in this report was performed using separate weights for parents and teens. The parent weight was created in a multistep process that begins with a base design weight for the parent,

which is computed to reflect their probability of selection for recruitment into the KnowledgePanel. These selection probabilities were then adjusted to account for the probability of selection for this survey, which included oversamples of Black and Hispanic parents. Next, an iterative technique was used to align the parent design weights to population benchmarks for parents of teens ages 13 to 17 on the dimensions identified in

Weighting dimensions

Variable	Benchmark source
Age x Gender	2021 March Supplement of the
Race/Ethnicity	Current Population Survey (CPS)
Census Region	
Metropolitan Status	
Education (Parents only)	
Household Income	
Household Income x Race/Ethnicity	
Total Household Size	
Language proficiency	2019 American Community Survey (ACS)
Note: Estimates from the ACS are based on noni	nstitutionalized adults.
PEW RESEARCH CENTER	

the accompanying table, to account for any differential nonresponse that may have occurred.

To create the teen weight, an adjustment factor was applied to the final parent weight to reflect the selection of one teen per household. Finally, the teen weights were further raked to match the demographic distribution for teens ages 13 to 17 who live with parents. The teen weights were adjusted on the same teen dimensions as parent dimensions with the exception of teen education, which was not used in the teen weighting.

Sampling errors and tests of statistical significance take into account the effect of weighting. Interviews were 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 tables show 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
Teens (ages 13-17)	1,316	3.2 percentage points
Party/Party Lean		
Rep/Lean Rep	542	5.0 percentage points
Dem/Lean Dem	666	4.4 percentage points
Note: Unweighted sample sizes not describe a group's contribut details.		

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

Dispositions and response rates

The tables below display dispositions used in the calculation of completion, qualification and cumulative response rates. 3

Dispositions	
Total panelists assigned	5,580
Total study completes (including nonqualified)	1,607
Number of qualified completes	1,316
Number of study break-offs	949
Study Completion Rate (COMPR)	29%
Study Qualification Rate (QUALR)	82 %
Study Break-off Rate (BOR)	37%

Cumulative response rate calculations	
Study-specific Average Panel Recruitment Rate (RECR)	8.4%
Study-specific Average Household Profile Rate (PROR)	58.5%
Study-specific Average Household Retention Rate (RETR)	80.9%
Cumulative Response Rate	1.4%

© Pew Research Center, 2022

³ For more information on this method of calculating response rates, see Callegaro, Mario and Charles DiSogra. 2008. "Computing response metrics for online panels." Public Opinion Quarterly 72(5). pp. 1008-1032.