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Americans' Trust in Scientists, Positive Views of Science Continue to Decline

Among both Democrats and Republicans, trust in scientists is lower than before the pandemic

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RECOMMENDED CITATION

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About Pew Research Center

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How we did this

Pew Research Center conducted this study to understand how Americans view science, as well as their levels of confidence in groups and institutions in society. For this analysis, we surveyed 8,842 U.S. adults from Sept. 25 to Oct. 1, 2023.

Everyone who took part in the survey is a member of the Center's American Trends Panel (ATP), an online survey panel that is recruited through national, random sampling of residential addresses. This way, nearly all U.S. adults have a chance of selection. The survey is weighted to be representative of the U.S. adult population by gender, race, ethnicity, partisan affiliation, education and other categories. Read more about the [ATP's methodology](#).

Here are the [questions used for this report](#), along with responses, and [its methodology](#).

Americans' Trust in Scientists, Positive Views of Science Continue to Decline

Among both Democrats and Republicans, trust in scientists is lower than before the pandemic

A new Pew Research Center survey finds the share of Americans who say science has had a mostly positive effect on society has fallen and there's been a continued decline in public trust in scientists.

In this report, we cover:

- Trust in scientists and other groups (Chapter 1)
- Views of the impact of science on society (Chapter 2)
- Support for government investments in science (Chapter 3)

Key findings

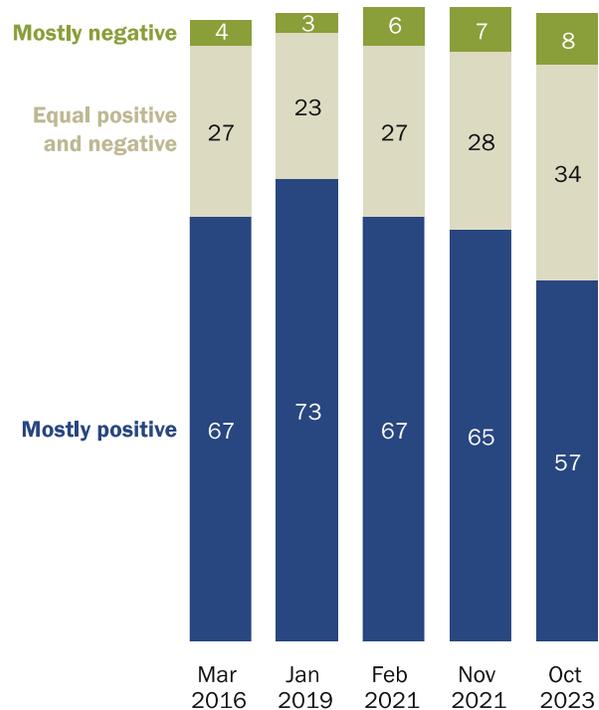
Impact of science on society

Overall, 57% of Americans say science has had a mostly positive effect on society. This share is down 8 percentage points since November 2021 and down 16 points since before the start of the coronavirus outbreak.

About a third (34%) now say the impact of science on society has been equally positive as negative. A small share (8%) think science has had a mostly negative impact on society.

Fewer Americans now say science has had a mostly positive effect on society

% of U.S. adults who say science has had a(n) ___ effect on society



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
"Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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Trust in scientists

When it comes to the standing of scientists, 73% of U.S. adults have a great deal or fair amount of confidence in scientists to act in the public's best interests. But trust in scientists is 14 points lower than it was at the early stages of the pandemic.

The share expressing the strongest level of trust in scientists – saying they have a *great deal* of confidence in them – has fallen from 39% in 2020 to 23% today.

As trust in scientists has fallen, distrust has grown: Roughly a quarter of Americans (27%) now say they have not too much or no confidence in scientists to act in the public's best interests, up from 12% in April 2020.

Ratings of *medical* scientists mirror the trend seen in ratings of scientists generally. Read [Chapter 1 of the report](#) for a detailed analysis of this data.

How scientists compare with other prominent groups

The Center survey of 8,842 U.S. adults conducted Sept. 25-Oct. 1, 2023, finds that, despite recent declines in ratings, scientists and medical scientists continue to be held in high regard compared with other prominent groups in society. Smaller shares of Americans express confidence in business leaders, religious leaders, journalists and elected officials to act in the public's best interests. As with scientists, most of these groups have seen their ratings decline in recent years.

Americans have expressed [low trust in federal government](#) and other institutions, like Congress, for decades. And [political polarization](#) – the widening gap between the views of Republicans and Democrats across a broad range of issues and attitudes – has come to be a dominant feature of American political life.

Why does public trust in scientists matter?

People with greater trust in scientists are more likely to align their own beliefs and actions with expert guidance and understanding.

For instance, those with high trust are more likely to have gotten vaccines for COVID-19 and the flu. They are also more likely to say human activity contributes to climate change.

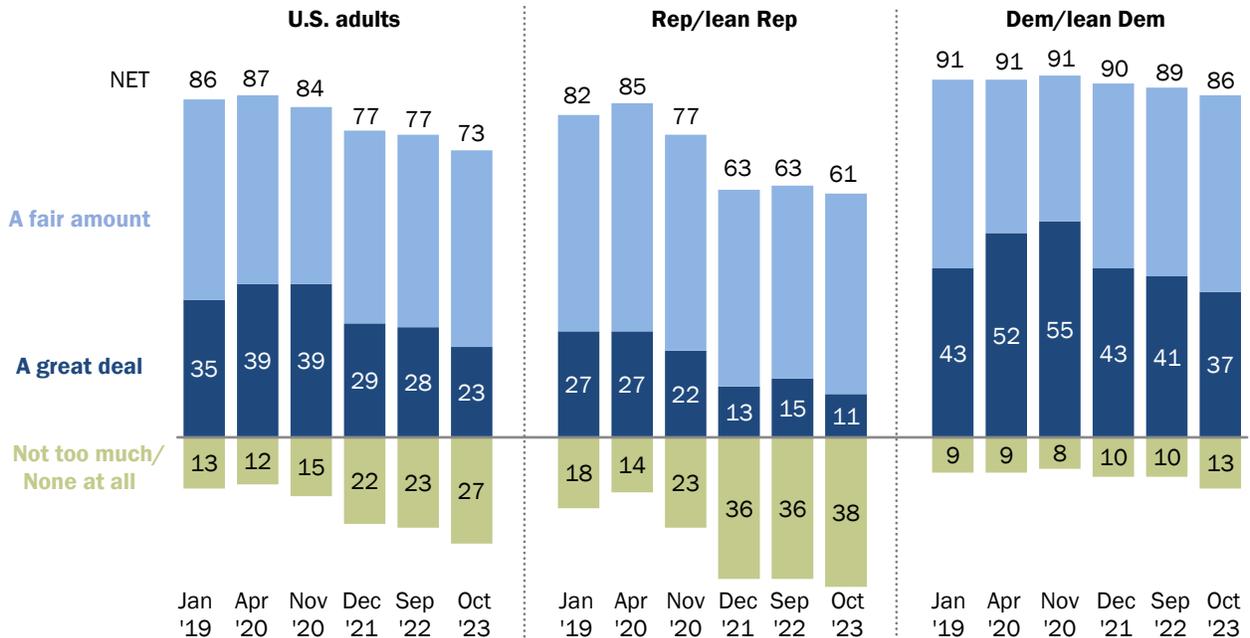
In addition, scientific leaders are concerned that differences in levels of trust by things like party identification, race and ethnicity, and education could contribute to the benefits of science being spread unevenly across society.

Differences between Republicans and Democrats in ratings of scientists and science

Declining levels of trust in scientists and medical scientists have been particularly pronounced among Republicans and Republican-leaning independents over the past several years. In fact, **nearly four-in-ten Republicans (38%) now say they have *not too much or no confidence at all* in scientists** to act in the public’s best interests. This share is up dramatically from the 14% of Republicans who held this view in April 2020. Much of this shift occurred during the first two years of the pandemic and has persisted in more recent surveys.

Declining levels of public trust in scientists

% of U.S. adults who have ___ of confidence in **scientists** to act in the best interests of the public



Note: Respondents who did not give an answer are not shown.
 Source: Survey of U.S. adults conducted Sept. 25-Oct 1, 2023.
 “Americans’ Trust in Scientists, Positive Views of Science Continue to Decline”

Confidence in scientists has also moved lower among Democrats. The share of Democrats and Democratic-leaning independents with a *great deal* of confidence in scientists – which initially rose in the pandemic’s first year – now stands at 37%, down from a high of 55% in November 2020. But unlike Republicans, a large majority of Democrats (86%) continue to express *at least a fair amount* of confidence in scientists to act in the public’s best interests. The overall differences in partisan views remain much more pronounced today than they were prior to the coronavirus outbreak.

One of the starkest illustrations of polarization in views of science is the drop in the share of Republicans who view the societal impact of science positively.

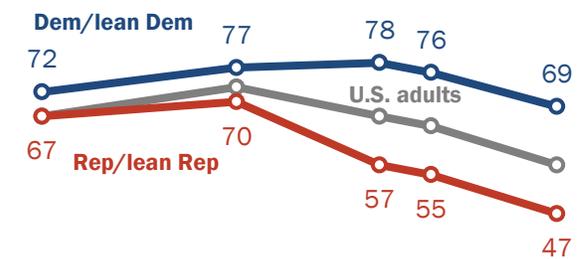
Fewer than half of Republicans (47%) now say that science has had a mostly positive effect on society. In 2019, 70% of Republicans said that science has had a mostly positive effect.

A majority of Democrats (69%) continue to say science has had a mostly positive effect on society, though this share is 8 points lower than it was in 2019.

Republicans were [largely critical of the country’s response to the coronavirus outbreak](#). For instance, large shares said too little priority was given to respecting individuals’ choices, supporting businesses and economic activity, and meeting the needs of K-12 students. In addition, many Republicans felt that [public health officials’ personal views had too much influence on policy](#) and that officials were too quick to dismiss views that challenged their scientific understanding.

Republicans turn much less positive on science’s impact on society

% of U.S. adults who say science has had a *mostly positive effect on society*



Mar '16 Jan '19 Feb '21 Nov '21 Oct '23

Note: Respondents who gave other responses or did not give an answer are not shown.
Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023. “Americans’ Trust in Scientists, Positive Views of Science Continue to Decline”

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Government investments in science

Despite declines in ratings of scientists and science, a large majority of Americans continue to see government investments in science as worthwhile. And most place at least some importance on the United States being a world leader in scientific achievements.

About eight-in-ten Americans (78%) say government investments in scientific research are usually worthwhile for society. Far fewer (20%) think these investments are generally not worthwhile.

Large majorities across demographic and education groups see government investments in scientific research as worthwhile, as do large majorities of both Democrats and Republicans.

In addition, 52% of Americans think it is *very* important for the U.S. to be a world leader in scientific achievements; an additional 37% think this is *somewhat* important. These shares are more or less unchanged since last year.

Most Americans view government investments in scientific research as worthwhile for society

% of U.S. adults who say ...



Note: Respondents who did not give an answer are not shown.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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Explore the rest of this report

- [Confidence in scientists, medical scientists, and other groups and institutions in society](#) (Chapter 1)
- [Views of the impact of science on society](#) (Chapter 2)
- [Government investments in scientific research and the importance of the U.S. being a world leader in science](#) (Chapter 3)

1. Confidence in scientists, medical scientists, and other groups and institutions in society

Public confidence in scientists and medical scientists remains higher than most other groups and institutions asked about in the survey.

Roughly three-quarters of Americans say they have a great deal or a fair amount of confidence in medical scientists (77%), the military (74%) and scientists (73%) to act in the public's best interests. These three groups receive the highest ratings of the nine included in the survey. About a quarter say they have a *great deal* of confidence in each to act in the public's best interests.

Somewhat smaller majorities of Americans say they have a great deal or a fair amount of confidence in police officers (69%) and public school principals (65%) to act in the public's best interests. Slightly more than half (53%) express this level of confidence in religious leaders.

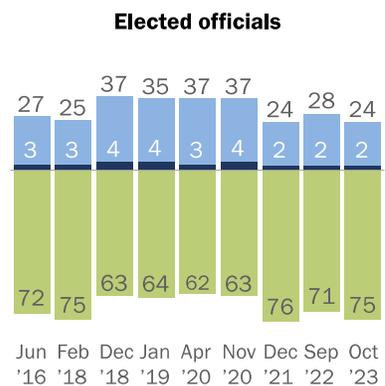
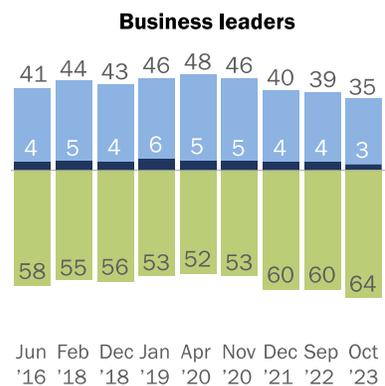
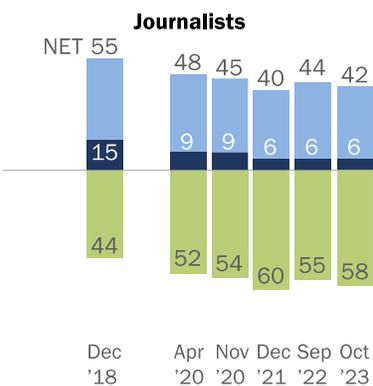
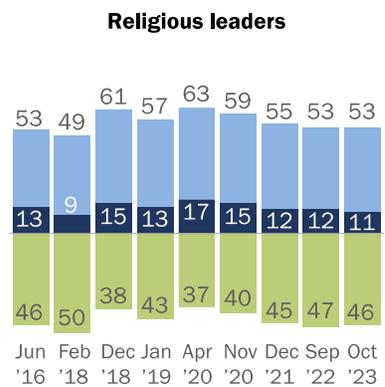
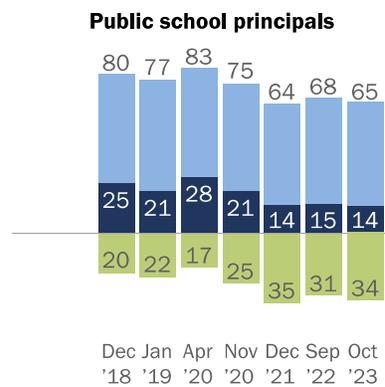
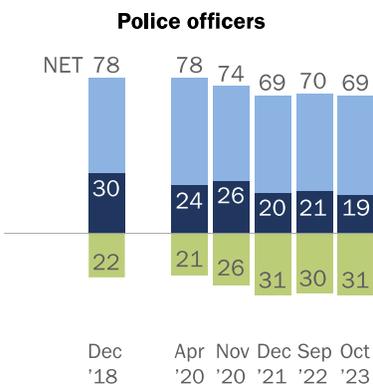
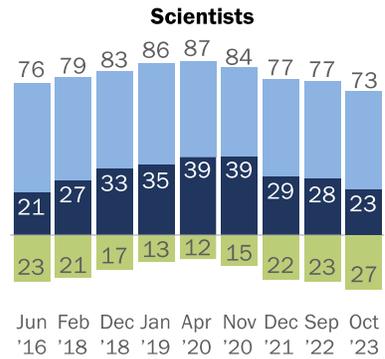
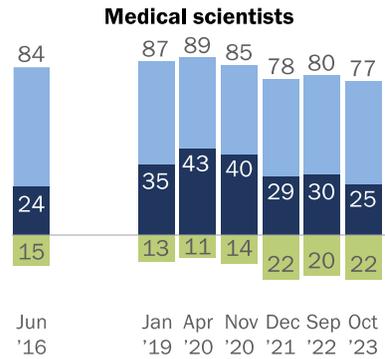
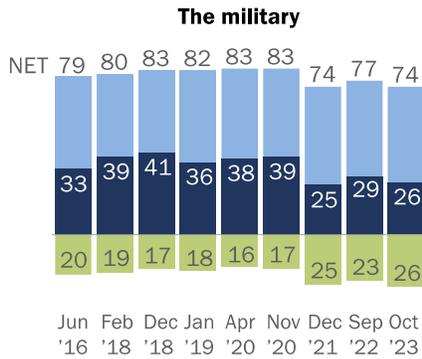
Americans continue to express lower levels of trust in journalists, business leaders and elected officials. Majorities say they have *not too much* or *no confidence at all* in these three groups to act in the public's best interests.

All nine groups in the survey have seen their ratings decline at least a little since early 2020.

Majorities of Americans say they have at least a fair amount of confidence in scientists, but ratings have fallen since early in the coronavirus outbreak

% of U.S. adults who have ___ of confidence in the following groups to act in the best interests of the public

● A great deal ● A fair amount ● Not too much/No confidence at all



Note: Respondents who did not give an answer are not shown.
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Education and trust in scientists

Americans with higher levels of education express greater levels of trust in scientists than those with less formal education.

Among those with a bachelor's degree or more education, 80% have at least a fair amount of confidence in scientists, including 30% who have a great deal of confidence. Among adults with some college or less education, 69% have at least a fair amount of confidence, including 20% who say they have a great deal.

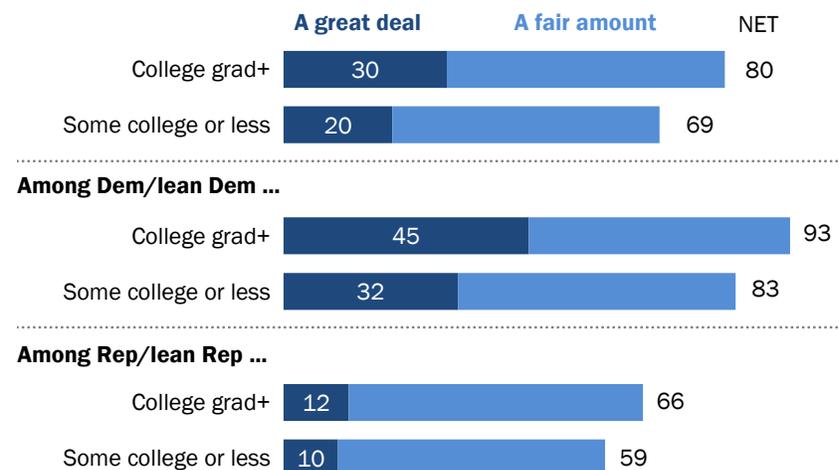
Differences by education are more pronounced within the Democratic Party than the Republican Party. Among Democrats, 45% of those with a bachelor's degree or more education say they have a *great deal* of confidence in scientists, compared with 32% of those with some college experience or less education.

Still, strong trust in scientists has continued to decline in the last year among Democrats with at least a bachelor's degree (down 8 percentage points since September 2022 and down 21 points since November 2020). By comparison, most of the declines in trust among Democrats with some college experience or less education occur between November 2020 and December 2021 (down 13 points). [Refer to the Appendix for more details.](#)

Among Republicans, small shares of both those with a bachelor's degree or more education (12%) and those with some college experience or less education (10%) have a great deal of confidence in

College graduates express greater trust in scientists than those without a four-year degree

% of U.S. adults who have ___ of confidence in **scientists** to act in the best interests of the public



Note: Respondents who gave other responses or did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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scientists. Strong trust among both groups fell sharply in the early months of the coronavirus outbreak, while changes have been more modest in the last two years.

Race and ethnicity and trust in scientists

White, Black and Hispanic adults have similar levels of confidence in scientists and medical scientists overall. Asian adults express the highest confidence in scientists and medical scientists across racial and ethnic groups.

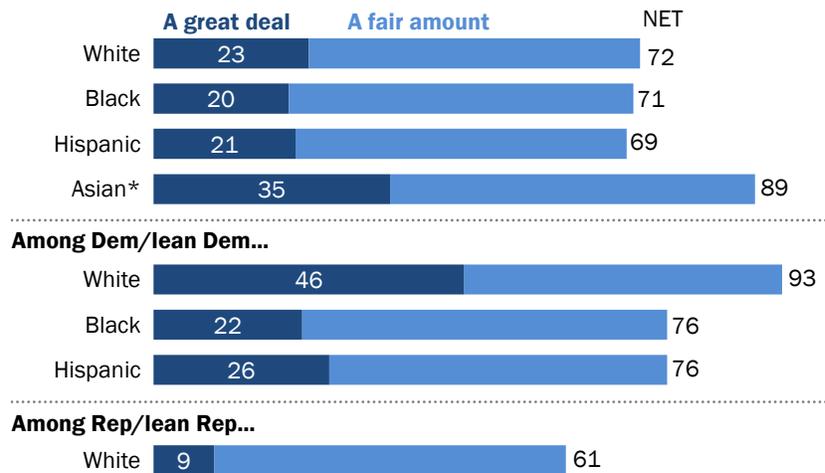
Among Democrats, however, larger shares of White Democrats (46%) than Hispanic (26%) and Black

Democrats (22%) say they have a *great deal* of confidence in scientists. (Sample size for Asian Democrats is too small to analyze responses separately.)

There are similar patterns in views of medical scientists. [Refer to the Appendix for more details.](#)

White Democrats express higher levels of confidence in scientists than Black and Hispanic Democrats

% of U.S. adults who have ____ of confidence in **scientists** to act in the best interests of the public



* Estimates for Asian adults are representative of English speakers only.
 Note: Sample sizes for Asian Democrats and for Black, Hispanic and Asian Republicans are too small to analyze responses separately. Respondents who gave other responses or did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are non-Hispanic. Hispanic adults are of any race.
 Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
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A note about the Asian adult sample

This survey includes a total sample size of 653 Asian adults. The sample primarily includes English-speaking Asian adults and, therefore, may not be representative of the overall Asian adult population. Despite this limitation, it is important to report the views of Asian adults on the topics in this study. As always, Asian adults' responses are incorporated into the general population figures throughout this report.

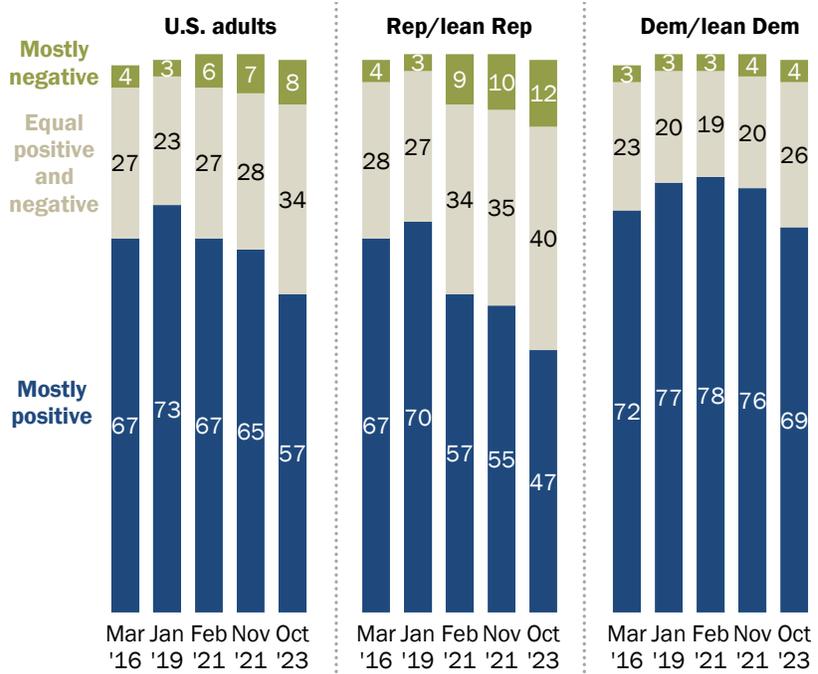
2. Views on the impact of science on society

The share of Americans who say science has had a mostly positive effect on society has declined in recent years. In the new survey, 57% say science has had a mostly positive effect on society, while 34% say science has had about equal positive and negative effects and 8% say science has had a mostly negative effect. Positive ratings of the impact of science are down 8 percentage points since November 2021 and down 16 points since 2019.

Democrats have now become much more likely than Republicans to say science has had a mostly positive impact on society (69% vs. 47%). This gap is the result of steeper declines in positive ratings among Republicans than among Democrats since 2019 (down 23 points and 8 points, respectively).

Declining share of Americans say science has had a mostly positive effect on society

% of U.S. adults who say science has had a(n) ___ effect on society



Note: Respondents who did not give an answer are not shown.
 Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
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Race and ethnicity and views on societal impact of science

Views of the impact of science on society differ across racial and ethnic groups, with Black and Hispanic adults offering less positive assessments than other groups.

Overall, 79% of Asian adults and 60% of White adults say science has had a mostly positive impact on society.

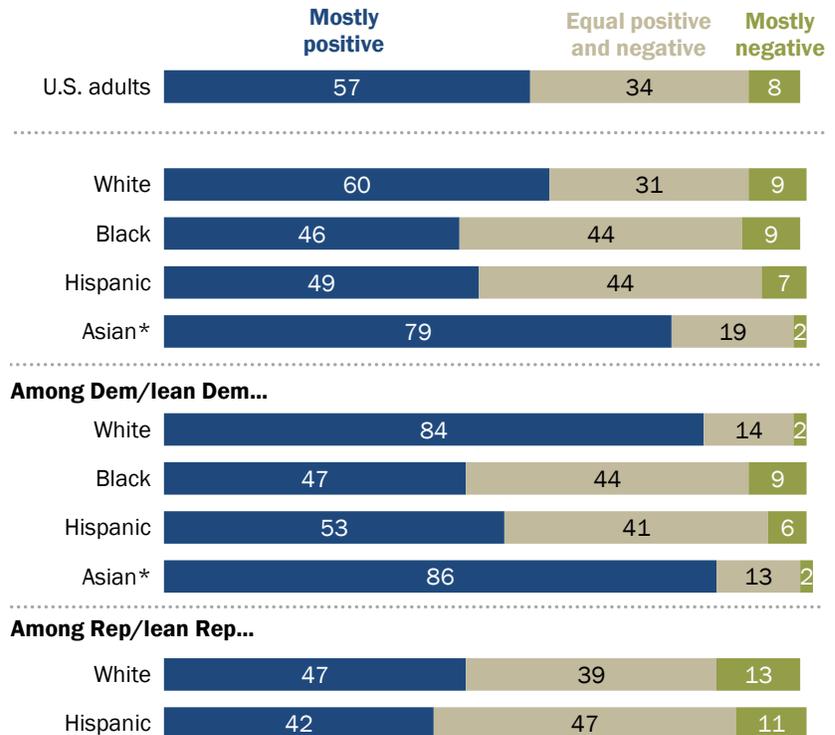
By contrast, 49% of Hispanic adults say science has had a mostly positive effect on society, while nearly as many (44%) say its impact has been an equal mix of positive and negative. Views are similar among Black adults: 46% describe the impact of science as mostly positive, compared with 44% who say it’s been a mix of positive and negative.

Among Democrats, large majorities of Asian Democrats (86%) and White Democrats (84%) say science has had a mostly positive effect on

society. By comparison, Hispanic Democrats (53%) and Black Democrats (47%) are more than 30 points less likely to say the impact of science on society has been mostly positive.

Black and Hispanic adults are less likely than others to see a mostly positive impact of science on society

% of U.S. adults who say science has had a(n) ___ effect on society



* Estimates for Asian adults are representative of English speakers only.
 Note: Sample sizes for Black and Asian Republicans are too small to analyze responses separately. Respondents who did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are non-Hispanic. Hispanic adults are of any race.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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A note about the Asian adult sample

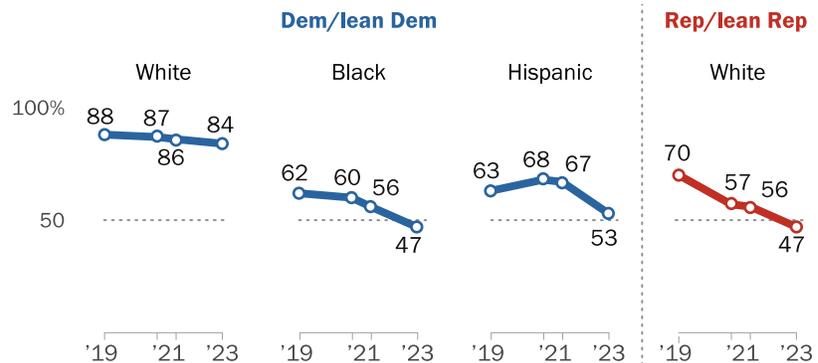
This survey includes a total sample size of 653 Asian adults. The sample primarily includes English-speaking Asian adults and, therefore, may not be representative of the overall Asian adult population. Despite this limitation, it is important to report the views of Asian adults on the topics in this study. As always, Asian adults' responses are incorporated into the general population figures throughout this report.

The gap in views between White Democrats and Black and Hispanic Democrats has grown significantly over the past few years due to declines in the shares of Black and Hispanic Democrats who say the impact of science on society has been mostly positive. (There is insufficient sample size in past Center surveys to analyze the trend for Asian Democrats.)

The share of White Republicans who say science has had a mostly positive impact on society has declined steadily from 70% in 2019 to 47% in the current survey. (A large majority of Republicans are White. Sample sizes of Republicans of other races are too small to analyze responses separately.) White Republicans are now 37 points less likely than White Democrats to view the impact of science positively; in 2019, this gap was 18 points.

Declining shares of Black and Hispanic Democrats say science has had a mostly positive effect on society

% of U.S. adults who say science has had a *mostly positive* effect on society



Note: Sample sizes for Black and Hispanic Republicans are too small to analyze responses separately. Respondents who gave other responses or did not give an answer are not shown. White and Black adults include those who report being only one race and are non-Hispanic. Hispanic adults are of any race.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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Education and views on the societal impact of science

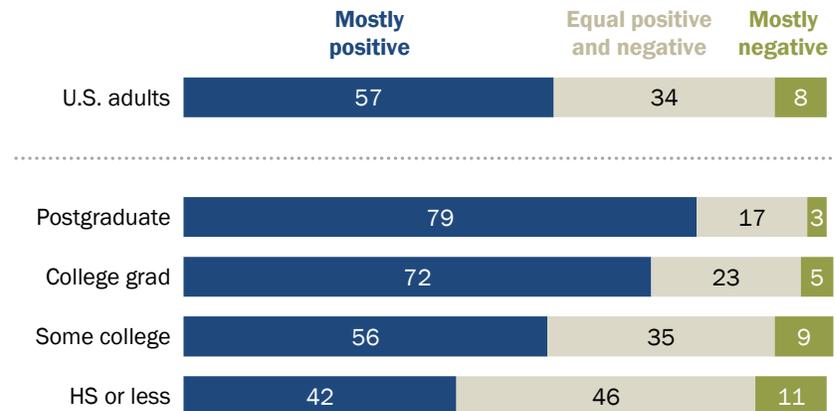
Americans with higher levels of education are especially likely to say science has had a mostly positive effect on society. About eight-in-ten adults with a postgraduate degree say this, as do 72% of those with a bachelor's degree.

A smaller majority of Americans with some college education say science has had a mostly positive effect on society (56%). And fewer than half of those with a high school diploma or less education hold this view (42%).

Within both parties, adults with higher levels of education offer more positive ratings of the impact of science on society than those with lower levels of education.

Large educational differences in views of the effect of science on society

% of U.S. adults who say science has had a(n) ___ effect on society



Note: Respondents who did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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3. Government investments in scientific research and the importance of the U.S. being a world leader in science

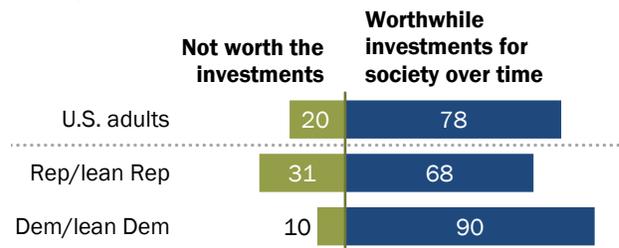
Majorities of Americans continue to value government investments in scientific research and think it's important for the United States to be a world leader in science. But Americans are largely pessimistic about the country's progress internationally: Few believe the U.S. is gaining ground in scientific achievement compared with other countries around the world.

About eight-in-ten Americans (78%) say government investments in scientific research aimed at advancing knowledge are usually worthwhile for society over time. Far fewer (20%) say investments in scientific research are not worthwhile. Views on this question are similar to a year ago.

Majorities of both Democrats and Republicans say government investments in scientific research are worthwhile. Still, Democrats are much more likely to hold this view than Republicans (90% vs. 68%).

78% say U.S. government investments in scientific research are worthwhile

% of U.S. adults who say government investments in scientific research aimed at advancing knowledge are usually ...



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
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How important is it for the U.S. to be a world leader in scientific achievements?

Overall, 52% of Americans say it is very important for the U.S. to be a world leader in scientific achievements. An additional 37% say it is somewhat important. Just 10% say leading in scientific achievements is not too or not at all important for the U.S.

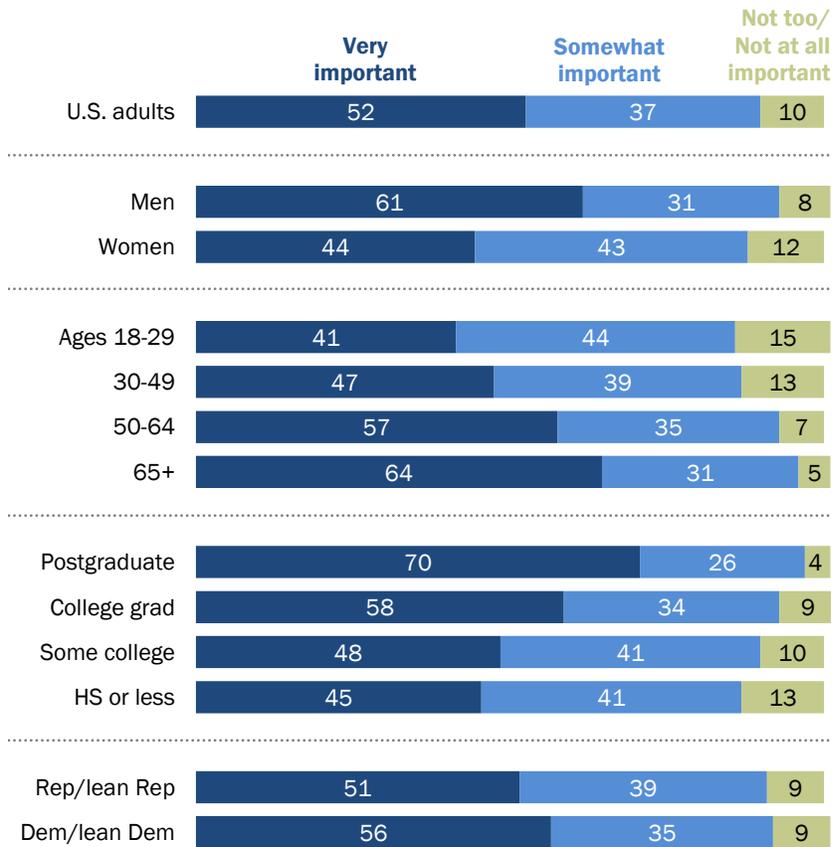
These shares are similar to when the Center last asked this question a year ago.

Men, older Americans and those with more education are especially likely to say it is very important the U.S. is a world leader in scientific achievements.

Democrats and Republicans have largely similar views on this question: 56% of Democrats and 51% of Republicans say it is very important for the U.S. to be a world leader in scientific achievements.

About half of Americans say it is very important that the U.S. is a world leader in scientific achievements

% of U.S. adults who say that when thinking about all of the important goals for the country, it is ___ for the U.S. to be a world leader in scientific achievements



Note: Respondents who did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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Views on how U.S. scientific achievements compare with those of other countries

Only 14% of Americans say the U.S. is gaining ground in scientific achievements compared with other countries. A larger share (39%) say the U.S. is *losing ground* in scientific achievements, and 45% say the U.S. is staying in about the same place relative to other countries.

Refer to the [Appendix](#) for more details on how these views differ across groups.

Only 14% think the U.S. is gaining ground in science achievement compared with the rest of the world

% of U.S. adults who say that when it comes to scientific achievements, the U.S. is ___ compared with other countries around the world



Note: Respondents who did not give an answer are not shown.
 Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
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Among those who say the U.S. is losing ground when it comes to scientific achievements, 58% say this bothers them a great deal or quite a bit. Smaller shares say this bothers them some (27%) or a little or not at all (15%).

Science and the pace of change in American life

Science is a driver of innovation and change in society. When asked to consider the pace of change, 33% of Americans say developments in science are changing our way of life too quickly, compared with 15% who say science is changing American life too slowly. The most widely held view among the public is that the pace of change stemming from scientific developments is about right (51%).

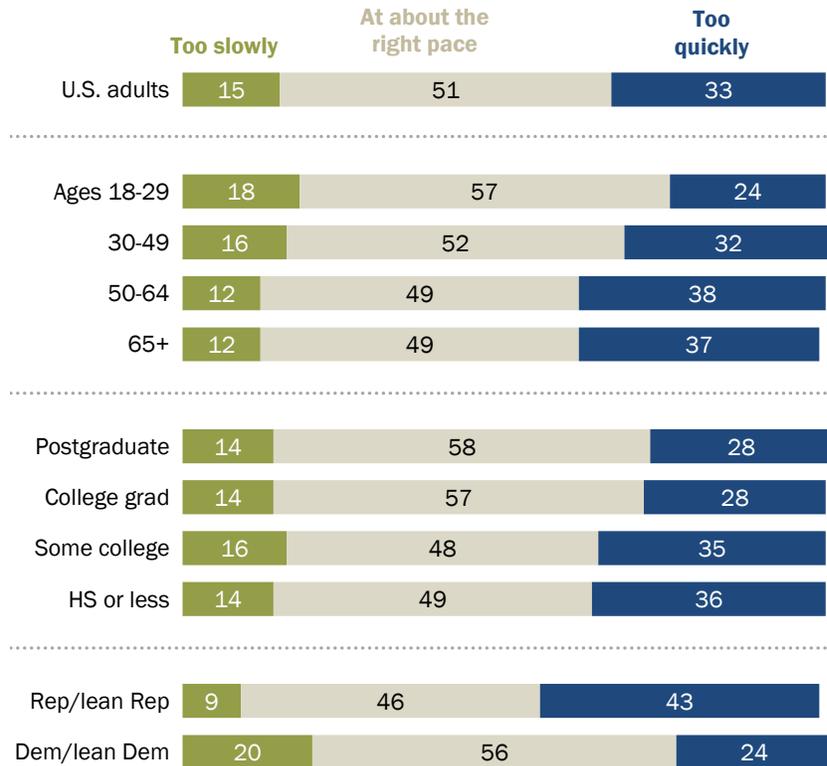
Older adults are more likely than younger adults to say developments in science are changing our way of life too quickly.

And those with lower levels of education are somewhat more likely than those with higher levels of education to feel that science is changing things too quickly.

Among Republicans and Republican-leaning independents, about as many say developments in science are changing our way of life too quickly (43%) as say the pace of change is about right (46%). Among Democrats and Democratic-leaning independents, far more say the pace of change spurred by science is about right rather than too quick (56% vs. 24%).

A third of Americans say developments in science are changing our way of life ‘too quickly’

% of U.S. adults who say developments in science are changing our way of life ...



Note: Respondents who did not give an answer are not shown. “Some college” includes those with an associate degree and those who attended college and did not obtain a degree.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

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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 ATP Wave 135, conducted from Sept. 25 to Oct. 1, 2023, and includes an [oversample](#) of Hispanic men, non-Hispanic Black men and non-Hispanic Asian adults in order to provide more precise estimates of the opinions and experiences of these smaller demographic subgroups. These oversampled groups are weighted back to reflect their correct proportions in the population.

A total of 8,842 panelists responded out of 9,577 who were sampled, for a response rate of 92%. 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 8,842 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 address-based sampling (ABS)

recruitment. A study cover letter and a pre-incentive are mailed to a stratified, random sample of households selected from the U.S. Postal Service's Delivery Sequence File. This Postal Service 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 Within each sampled household, the adult with the next birthday is asked to participate. Other details of the ABS recruitment protocol have changed over time but are available upon request.²

We have recruited a national sample of U.S. adults to the ATP approximately once per year since 2014. In some years, the recruitment has included additional effort (known as an "oversample") to boost sample size with underrepresented groups. For example, Hispanic, Black and Asian adults were oversampled in 2019, 2022 and 2023, respectively.

Across the six address-based recruitments, a total of 23,862 adults were invited to join the ATP, of whom 20,917 agreed to join the panel and completed an initial profile survey. Of the 30,859

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	1,395
Aug. 27 to Oct. 4, 2015	Landline/ cell RDD	6,004	2,976	833
April 25 to June 4, 2017	Landline/ cell RDD	3,905	1,628	405
Aug. 8 to Oct. 31, 2018	ABS	9,396	8,778	3,853
Aug. 19 to Nov. 30, 2019	ABS	5,900	4,720	1,388
June 1 to July 19, 2020; Feb. 10 to March 31, 2021	ABS	3,197	2,812	1,441
May 29 to July 7, 2021; Sept. 16 to Nov. 1, 2021	ABS	1,329	1,162	732
May 24 to Sept. 29, 2022	ABS	3,354	2,869	1,462
April 17 to May 30, 2023	ABS	686	576	435
	Total	43,580	30,859	11,944

Note: RDD is random-digit dial; ABS is address-based sampling. 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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¹ AAPOR Task Force on Address-based Sampling. 2016. "AAPOR Report: Address-based Sampling."

² Email pewsurveys@pewresearch.org.

individuals who have ever joined the ATP, 11,944 remained active panelists and continued to receive survey invitations at the time this survey was conducted.

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 noninstitutionalized persons ages 18 and older living in the U.S., including Alaska and Hawaii. It featured a stratified random sample from the ATP in which Hispanic men, non-Hispanic Black men, and non-Hispanic Asian adults were selected with certainty. The remaining panelists 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 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 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 Sept. 25 to Oct. 1, 2023. Postcard notifications were mailed to all ATP panelists with a known residential address on Sept. 25.

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 Sept. 25. The ATP panelists chosen for the initial soft launch were known

Invitation and reminder dates, ATP Wave 135

	Soft launch	Full launch
Initial invitation	Sept. 25, 2023	Sept. 26, 2023
First reminder	Sept. 28, 2023	Sept. 28, 2023
Final reminder	Sept. 30, 2023	Sept. 30, 2023

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responders who had completed previous ATP surveys within one day of receiving their invitation. All remaining English- and Spanish-speaking sampled panelists were included in the full launch and were sent an invitation on Sept. 26.

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 who consented to SMS messages received an SMS invitation and up to two SMS reminders.

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, four 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. These weights are then rescaled and adjusted to account for changes in the design of ATP recruitment surveys from year to year.

Finally, the weights are 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.

American Trends Panel weighting dimensions

Variable	Benchmark source
Age (detailed)	2021 American Community Survey (ACS)
Age x Gender	
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	2021 CPS March Supplement
Volunteerism	2021 CPS Volunteering & Civic Life Supplement
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation	2022 National Public Opinion Reference Survey (NPORS)
Frequency of internet use	
Religious affiliation	
<i>Additional weighting dimensions applied within Black adults</i>	
Age	2021 American Community Survey (ACS)
Gender	
Education	
Hispanic ethnicity	
Voter registration	2018 CPS Voting and Registration Supplement
Party affiliation	2022 National Public Opinion Reference Survey (NPORS)
Religious affiliation	

Note: Estimates from the ACS are based on noninstitutionalized adults. Voter registration is calculated using procedures from Hur, Achen (2013) and rescaled to include the total U.S. adult population.

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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.

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.

Sample sizes and margins of error, ATP Wave 135

Group	Unweighted sample size	Plus or minus ...
Total sample	8,842	1.6 percentage points
Form 1	4,412	2.2 percentage points
Form 2	4,430	2.2 percentage points
Men	4,021	2.4 percentage points
Women	4,740	2.0 percentage points
White	5,473	1.8 percentage points
Black	1,111	4.5 percentage points
Hispanic	1,193	4.8 percentage points
Asian	653	6.7 percentage points
Postgraduate	1,882	2.8 percentage points
College grad	2,313	2.6 percentage points
Some college	2,804	2.7 percentage points
HS or less	1,810	3.3 percentage points
Ages 18-29	759	4.9 percentage points
30-49	2,887	2.7 percentage points
50-64	2,604	2.6 percentage points
65+	2,583	2.6 percentage points
Rep/lean Rep	4,033	2.2 percentage points
Dem/lean Dem	4,507	2.2 percentage points

Note: This survey includes oversamples of Hispanic men, non-Hispanic Black men and non-Hispanic Asian adults. Unweighted sample sizes do not account for the sample design or weighting and do not describe a group's contribution to weighted estimates. Read the Sample design and Weighting sections for details.

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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, ATP Wave 135

	AAPOR code	Total
Completed interview	1.1	8,842
Logged on to survey; broke off	2.12	105
Logged on to survey; did not complete any items	2.1121	50
Never logged on (implicit refusal)	2.11	574
Survey completed after close of the field period	2.27	2
Completed interview but was removed for data quality		4
Screened out		0
Total panelists sampled for the survey		9,577
Completed interviews	I	8,842
Partial interviews	P	0
Refusals	R	729
Non-contact	NC	2
Other	O	4
Unknown household	UH	0
Unknown other	UO	0
Not eligible	NE	0
Total		9,577
AAPOR RR1 = $I / (I+P+R+NC+O+UH+UO)$		92%
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Cumulative response rate as of ATP Wave 135

	Total
Weighted response rate to recruitment surveys	11%
% of recruitment survey respondents who agreed to join the panel, among those invited	71%
% of those agreeing to join who were active panelists at start of Wave 135	46%
Response rate to Wave 135 survey	92%
Cumulative response rate	3%
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A note about the Asian adult sample

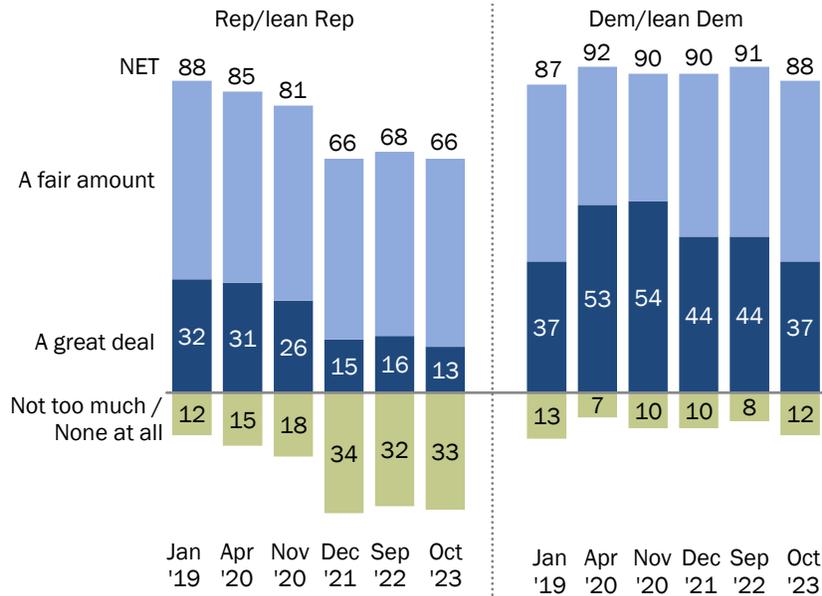
This survey includes a total sample size of 653 Asian adults. The sample primarily includes English-speaking Asian adults and, therefore, may not be representative of the overall Asian adult population. Despite this limitation, it is important to report the views of Asian adults on the topics in this study. As always, Asian adults' responses are incorporated into the general population figures throughout this report.

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Appendix

Declining confidence in medical scientists among Republicans and Democrats since early in the pandemic

% of U.S. adults who have ___ of confidence in **medical scientists** to act in the best interests of the public

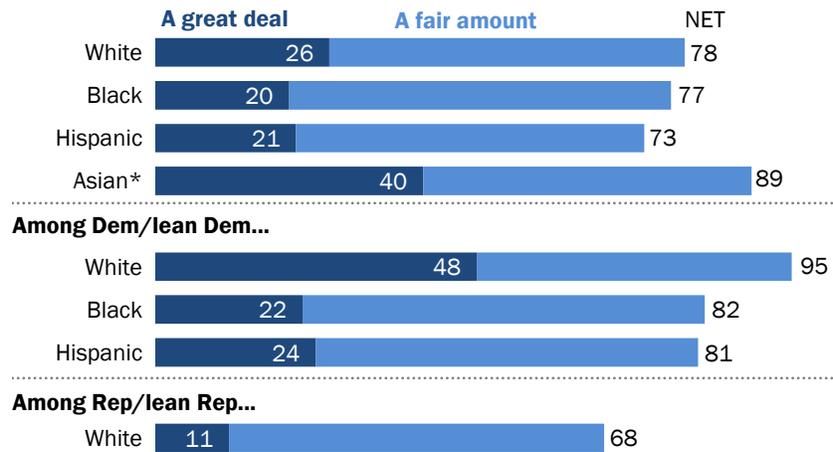


Note: Respondents who did not give an answer are not shown.
 Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.
 "Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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White Democrats have stronger confidence in medical scientists than Black and Hispanic Democrats

% of U.S. adults who have ___ of confidence in *medical scientists* to act in the best interests of the public



* Estimates for Asian adults are representative of English speakers only.

Note: Sample sizes for Asian Democrats and for Black, Hispanic and Asian Republicans are too small to analyze responses separately.

Respondents who gave other responses or did not give an answer are not shown. White, Black and Asian adults include those who report being only one race and are non-Hispanic. Hispanic adults are of any race.

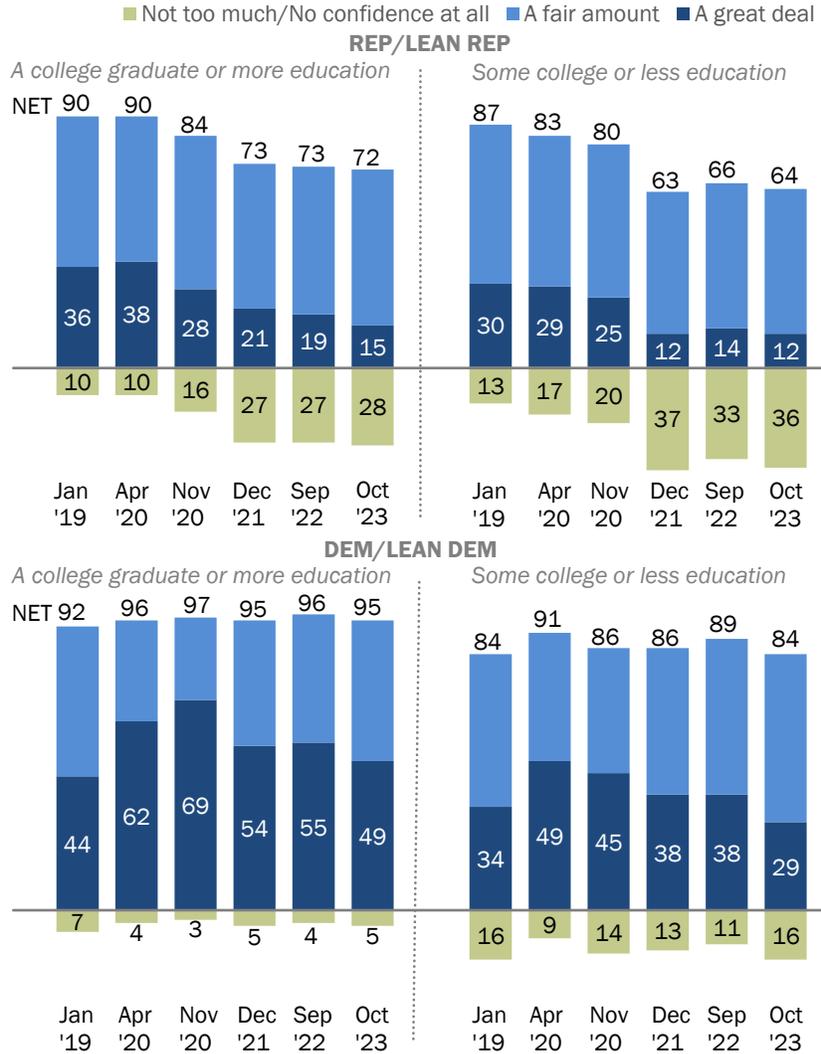
Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

"Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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Confidence in medical scientists by level of education among Republicans and Democrats

% of U.S. adults who have ___ of confidence in **medical scientists** to act in the best interests of the public



Note: Respondents who did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

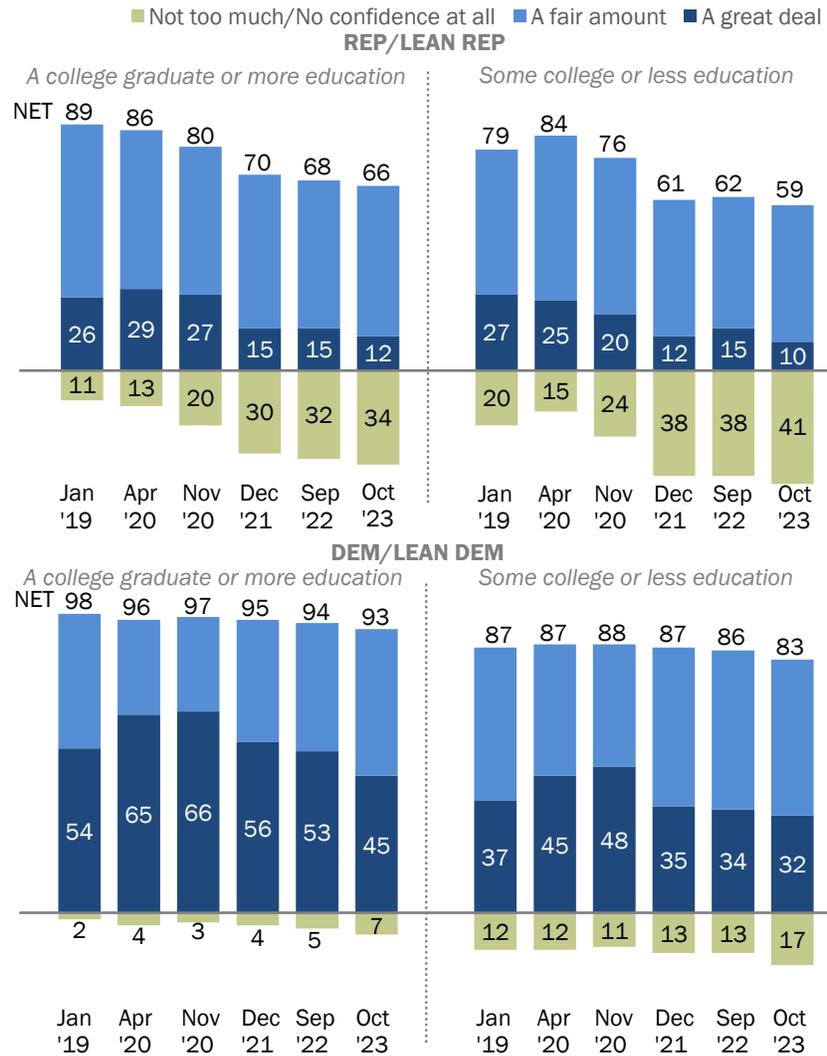
Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

"Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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Strong confidence in scientists has fallen sharply among Democrats with a bachelor's degree

% of U.S. adults who have ___ of confidence in **scientists** to act in the best interests of the public



Note: Respondents who did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

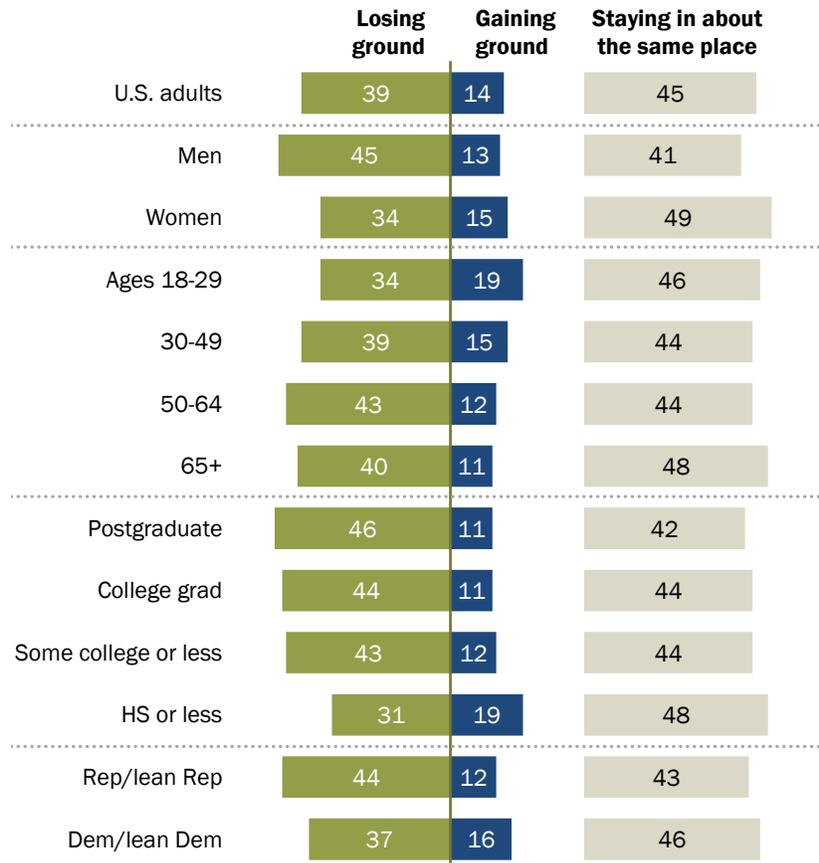
Source: Survey of U.S. adults conducted Sept. 25-Oct 1, 2023.

"Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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Men are more likely than women to say U.S. is losing ground in science compared with other countries

% of U.S. adults who say that when it comes to scientific achievements, the U.S. is ___ compared with other countries around the world



Note: Respondents who did not give an answer are not shown. "Some college" includes those with an associate degree and those who attended college and did not obtain a degree.

Source: Survey of U.S. adults conducted Sept. 25-Oct. 1, 2023.

"Americans' Trust in Scientists, Positive Views of Science Continue to Decline"

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Survey question wording and topline

**2023 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL
WAVE 135 – SCIENCE TOPLINE
Sep 25-Oct 1, 2023
N=8,842**

ASK ALL:

CONF

How much confidence, if any, do you have in each of the following to act in the best interests of the public? **[RANDOMIZE ITEMS]**

	<u>A great deal of confidence</u>	<u>A fair amount of confidence</u>	<u>Not too much confidence</u>	<u>No confidence at all</u>	<u>No answer</u>
a. Elected officials					
Sep 25-Oct 1, 2023	2	23	52	23	<1
Sep 13-18, 2022	2	26	50	21	<1
Nov 30-Dec 12, 2021	2	22	52	23	<1
Nov 18-29, 2020	4	32	47	15	1
Apr 20-26, 2020	3	33	49	14	1
Jan 7-21, 2019	4	32	50	14	<1
Nov 27-Dec 10, 2018	4	33	48	15	<1
Jan 29-Feb 13, 2018	3	22	52	23	<1
May 10-Jun 6, 2016	3	24	54	19	1
b. Journalists					
Sep 25-Oct 1, 2023	6	36	37	21	<1
Sep 13-18, 2022	6	38	36	19	<1
Nov 30-Dec 12, 2021	6	34	36	24	1
Nov 18-29, 2020	9	37	31	23	<1
Apr 20-26, 2020	9	39	33	19	<1
Nov 27-Dec 10, 2018	15	41	28	16	<1
TREND FOR COMPARISON:					
<i>The news media</i>					
Jan 7-21, 2019	9	38	34	19	<1
Nov 27-Dec 10, 2018	10	38	33	19	<1
Jan 29-Feb 13, 2018	8	32	35	25	<1
May 10-Jun 6, 2016	5	33	40	21	1
c. The military					
Sep 25-Oct 1, 2023	26	48	19	6	<1
Sep 13-18, 2022	29	48	17	6	<1
Nov 30-Dec 12, 2021	25	49	18	7	1
Nov 18-29, 2020	39	44	13	4	<1
Apr 20-26, 2020	38	45	13	4	<1
Jan 7-21, 2019	36	46	14	4	<1
Nov 27-Dec 10, 2018	41	41	12	4	1
Jan 29-Feb 13, 2018	39	41	15	4	<1
May 10-Jun 6, 2016	33	46	15	5	1

CONF CONTINUED ...

	<u>A great deal of confidence</u>	<u>A fair amount of confidence</u>	<u>Not too much confidence</u>	<u>No confidence at all</u>	<u>No answer</u>
d. Religious leaders					
Sep 25-Oct 1, 2023	11	43	31	15	1
Sep 13-18, 2022	12	41	31	16	<1
Nov 30-Dec 12, 2021	12	43	30	15	1
Nov 18-29, 2020	15	45	29	12	<1
Apr 20-26, 2020	17	46	26	11	1
Jan 7-21, 2019	13	44	30	12	<1
Nov 27-Dec 10, 2018	15	47	27	11	1
Jan 29-Feb 13, 2018	9	40	34	16	1
May 10-Jun 6, 2016	13	39	32	14	1
e. Business leaders					
Sep 25-Oct 1, 2023	3	32	48	16	<1
Sep 13-18, 2022	4	35	46	14	<1
Nov 30-Dec 12, 2021	4	36	45	15	1
Nov 18-29, 2020	5	41	41	12	<1
Apr 20-26, 2020	5	43	41	11	1
Jan 7-21, 2019	6	40	43	11	<1
Nov 27-Dec 10, 2018	4	39	43	14	<1
Jan 29-Feb 13, 2018	5	40	42	13	<1
May 10-Jun 6, 2016	4	37	44	14	1

ASK FORM 1 ONLY**[N=4,412]:**

f. Medical scientists					
Sep 25-Oct 1, 2023	25	53	17	5	<1
Sep 13-18, 2022	30	50	16	4	<1
Nov 30-Dec 12, 2021	29	49	17	5	<1
Nov 18-29, 2020	40	45	12	2	<1
Apr 20-26, 2020	43	46	9	2	<1
Jan 7-21, 2019	35	52	11	2	<1
May 10-Jun 6, 2016	24	60	12	3	1

ASK FORM 2 ONLY**[N=4,430]:**

g. Scientists					
Sep 25-Oct 1, 2023	23	50	22	5	1
Sep 13-18, 2022	28	49	18	5	1
Nov 30-Dec 12, 2021	29	49	17	5	1
Nov 18-29, 2020	39	45	13	3	<1
Apr 20-26, 2020	39	48	10	2	1
Jan 7-21, 2019	35	51	11	2	<1
Nov 27-Dec 10, 2018	33	49	14	3	<1
Jan 29-Feb 13, 2018	27	52	17	5	<1
May 10-Jun 6, 2016	21	55	18	4	1

NO ITEM H

CONF CONTINUED ...

	<u>A great deal of confidence</u>	<u>A fair amount of confidence</u>	<u>Not too much confidence</u>	<u>No confidence at all</u>	<u>No answer</u>
i. Public school principals for grades K-12					
Sep 25-Oct 1, 2023	14	52	26	8	<1
Sep 13-18, 2022	15	53	23	8	<1
Nov 30-Dec 12, 2021	14	51	26	9	1
Nov 18-29, 2020	21	54	19	6	<1
Apr 20-26, 2020	28	55	14	3	<1
Jan 7-21, 2019	21	56	18	4	1
Nov 27-Dec 10, 2018	25	55	16	4	<1
TREND FOR COMPARISON:					
<i>Public school principals and superintendents for grades K-12</i>					
Nov 27-Dec 10, 2018	22	55	17	5	1
May 10-Jun 6, 2016	13	53	27	7	1
j. Police officers					
Sep 25-Oct 1, 2023	19	50	22	8	1
Sep 13-18, 2022	21	49	22	8	<1
Nov 30-Dec 12, 2021	20	49	22	9	<1
Nov 18-29, 2020	26	48	19	7	<1
Apr 20-26, 2020	24	54	17	4	<1
Nov 27-Dec 10, 2018	30	48	16	5	<1

ASK ALL:

SC1 Overall, would you say science has had a mostly positive effect on our society or a mostly negative effect on our society?

	<u>Mostly positive</u>	<u>Mostly negative</u>	<u>Equal positive and negative effects</u>	<u>No answer</u>
Sep 25-Oct 1, 2023	57	8	34	<1
Nov 1-7, 2021	65	7	28	<1
Feb 16-21, 2021	67	6	27	1
Jan 7-21, 2019	73	3	23	<1
Mar 2-28, 2016	67	4	27	2

ASK ALL:

SCIPACE

Do you think developments in science are changing our way of life... **[RANDOMIZE ORDER OF OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]**

Sep 25-Oct 1,

2023

33	Too quickly
15	Too slowly
51	At about the right pace
1	No answer

ASK ALL:

SCI_US1

Thinking about all the important goals for the United States, how important do you think it is for the U.S. to be a world leader in scientific achievements?

	<u>Very important</u>	<u>Somewhat important</u>	<u>Not too important</u>	<u>Not at all important</u>	<u>No answer</u>
Sep 25-Oct 1, 2023	52	37	8	2	1
Sep 13-18, 2022	54	37	7	1	1

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: Thinking about all the important goals for the United States, how important do you think it is for the United States to be a world leader in scientific achievements? Do you think it is very important, somewhat important, not too important or not at all important?

Oct 1-28,

2019

69	<i>Very important</i>
24	<i>Somewhat important</i>
3	<i>Not too important</i>
3	<i>Not at all important</i>
1	<i>DK/Refused</i>

ASK ALL:

SCI_US2

Do you think government investments in scientific research aimed at advancing knowledge are usually... **[RANDOMIZE]**

	<u>Worthwhile investments for society over time</u>	<u>Not worth the investments</u>	<u>No answer</u>
Sep 25-Oct 1, 2023	78	20	2
Sep 13-18, 2022	81	18	1

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: In your opinion, are government investments in scientific research aimed at advancing knowledge usually worthwhile for society over time, or are they not worth the investment?

Oct 1-28,

2019

82	Yes, they are worthwhile for society over time
15	No, they are not worth the investment
3	DK/Refused

TREND FOR COMPARISON:

SCI3 In your opinion, do you think government investments in the following usually pay off in the long run, or are they not worth it? **[RANDOMIZE ITEMS]**

	Government investments usually pay off in the long run	Government investments usually aren't worth it	No answer
a. Basic scientific research Apr 23-May 6, 2018	77	22	1

TREND FOR COMPARISON:

Pew Research Center survey conducted by telephone: In your opinion, do government investments in **[INSERT ITEM; RANDOMIZE]** usually pay off in the long run, or are they not worth it?

	Yes, pay off in the long run	No, aren't worth it	DK/Ref (VOL.)
a. Basic scientific research Aug 15-25, 2014	71	24	5
Apr 28-May 12, 2009	73	18	9

ASK ALL:

SCI_US3

When it comes to scientific achievements, compared with other countries around the world, do you think the United States is... **[RANDOMIZE ORDER OF OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]**

	Gaining ground	Losing ground	Staying in about the same place	No answer
Sep 25-Oct 1, 2023	14	39	45	1
Sep 13-18, 2022	14	38	47	1

**ASK IF LOSING GROUND OR STAYING IN ABOUT THE SAME PLACE (SCI_US3 = 2,3)
[N=7,615]:**

SCI_US3b How much does it bother you that the U.S. is not gaining ground in scientific achievements compared with other countries?

Sep 25-Oct 1,
2023

14	A great deal
27	Quite a bit
32	Some
12	A little
15	Not at all
<1	No answer

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE