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Science News and Information Today

A majority of Americans rely on general outlets for science news but more say specialty sources get the facts right about science

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Table of Contents

About Pew Research Center	1
Table of Contents	2
Science news and information today	3
1. Most Americans express curiosity in science news, but a minority are active science news consumers	13
2. General news outlets are the most common science news source; most-seen stories highlight discoveries and “weird” findings	23
3. Niche information sources are the most trusted to get the facts right about science	31
4. Most Americans see at least some science posts on social media but tend to distrust what they see	37
5. Most Americans see science-related entertainment shows and movies in either a neutral or positive light	43
6. Citizen science, science-related hobbies and participation in informal science activities	48
Acknowledgments	53
Methodology	54
Appendix A: Detailed tables and regression analysis	56
Survey questionnaire and topline	62

Science News and Information Today

A majority of Americans rely on general outlets for science news but more say specialty sources get the facts right about science

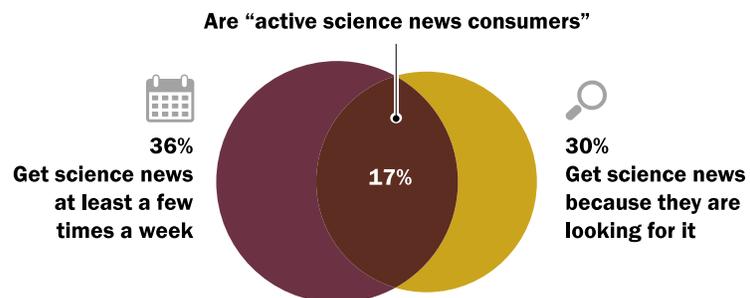
At a time when scientific information is increasingly at the center of public divides, most Americans say they get science news no more than a couple of times per month, and when they do, most say it is by happenstance rather than intentionally, according to a new study by Pew Research Center. Overall, about a third, 36%, of Americans get science news at least a few times a week, three-in-ten actively seek it out, and a smaller portion, 17%, do both.

And while Americans are most likely to get their science news from general news outlets and say the news media overall do a good job covering science, they consider a handful of specialty sources – documentaries, science magazines, and science and technology museums – as more likely to get the science facts right.

Public debates over science-related policy issues – such as global climate change, vaccine requirements for children,

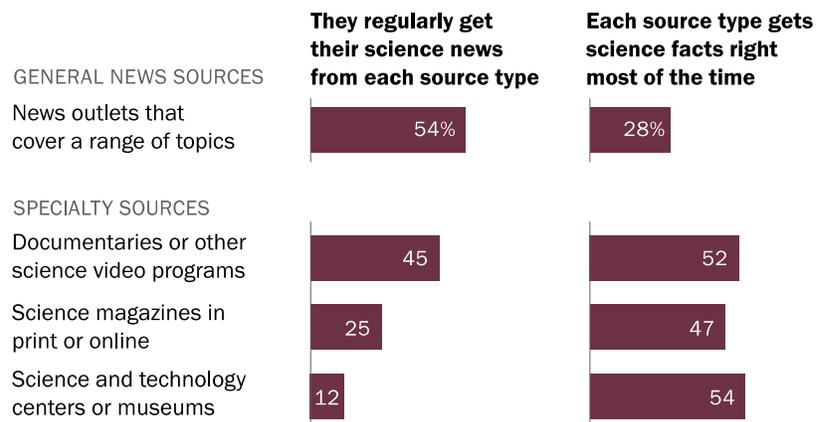
One-in-six Americans both actively seek out and frequently consume science news

% of U.S. adults who ...



Most Americans get science news from general sources, but fewer see them as accurate

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



Note: “Most of the time” combines those who said “almost all” or “more than half” of the time. Respondents who gave other responses or who did not give an answer are not shown. Other source types rated are not shown.

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

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genetically engineered foods, or developments in human gene editing – place continuous demands on the citizenry to stay abreast of scientific developments. In terms of how these and other scientific research issues get communicated, at least four-in-ten U.S. adults see significant problems stemming from media practices, researcher practices and the public, themselves. But when pressed, Americans put more overall blame on the way media cover scientific research than on the way researchers publish or share their findings (73% to 24%).

Social media, while prominent as a general news source, appear to play a modest role in informing Americans about science. Most social media users see science-related posts on these platforms, though only a quarter (25%) see “a lot” or “some” science posts; and a third (33%) consider this an important way they get science news. About a quarter of social media users (26%) follow science accounts; these users are much more likely to click through to articles on science posts and to consider social media an important way they get science news. Beyond news and social media, most Americans encounter science-related information through entertainment media and informal science learning venues such as museums or parks. And, amidst a growing array of options, some 16% have directly engaged with science research by participating in a type of [citizen science](#) research activity, themselves.

These are some of the findings from a survey conducted among a nationally representative sample of 4,024 adults, ages 18 or older, from May 30-June 12, 2017. The survey asked about a range of issues from how the public encounters science news and assesses what and who to trust to other ways that people engage with science information in everyday life, including participation in citizen science research projects, hobbies, and consumption of entertainment programming built around science, medicine or technology. The margin of sampling error based on the full sample is plus or minus 1.6 percentage points. For details, see the [Methodology](#).

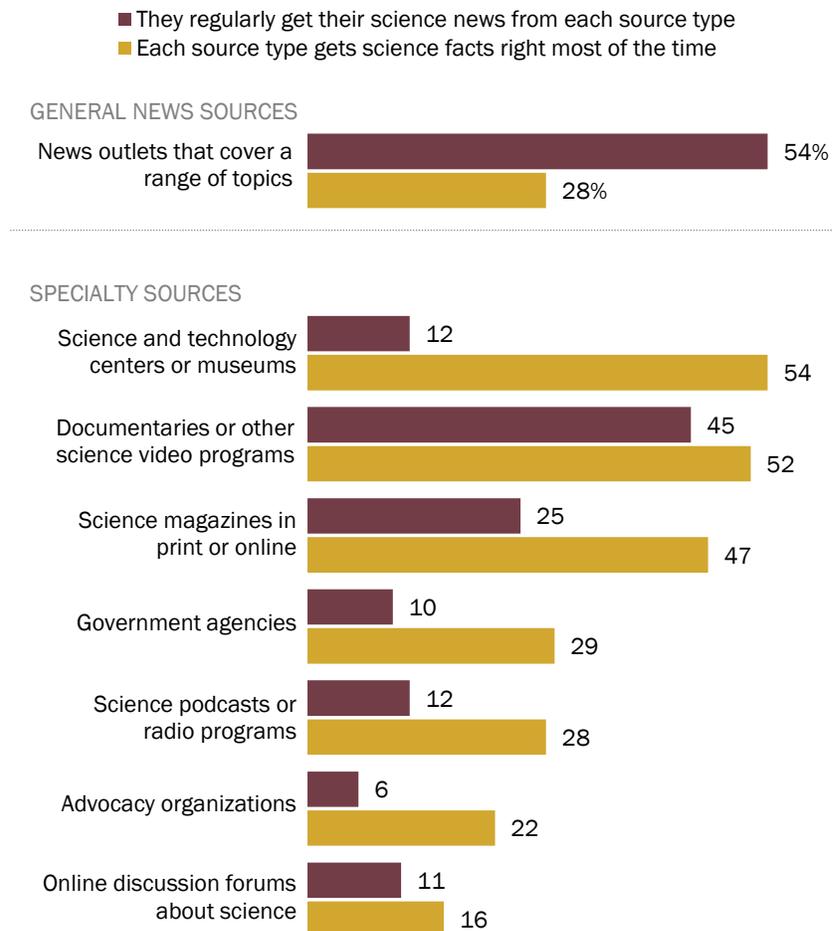
Most Americans lean on general news sources to learn about science but see specialty sources as more likely to be accurate

General news outlets – those that cover a range of different topics each day – are the largest providers of science news to Americans, even in this era when there is an increasing array of specialty science outlets.¹ A 54% majority of Americans regularly get their science news from general sources, higher than any of the 10 source types asked about in the survey. Even the most active of science news consumers regularly get science news from these general news outlets.

But general outlets, by a longshot, are not considered the most accurate – that distinction goes to specialty sources, specifically documentaries, science magazines, and science and technology museums. Fewer Americans regularly rely on

Most Americans rely on general news outlets for science news, but a minority says they get the facts right about science

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



Note: "Most of the time" combines those who said "almost all" or "more than half" of the time. Respondents who gave other responses on each question or who did not give an answer are not shown. Other source types rated are not shown.

Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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¹ See National Academies of Sciences, Engineering, and Medicine. 2017. "Communicating Science Effectively: A Research Agenda." and Schafer, Mike S. 2017. "How Changing Media Structures Are Affecting Science News Coverage." In Hall Jamieson, Kathleen, Dan M. Kahan and Dietram A. Scheufele, eds. "The Oxford Handbook of the Science of Science Communication."

these specialty sources for science news, but roughly half of Americans think that each of these three specialty sources get the facts right about science most of the time. Just 28% say the same of the general news outlets.

Americans see the media as largely doing a good job covering science but also see a range of problems in what and how the public learns about scientific research

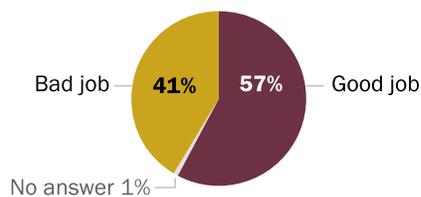
More than half (57%) of Americans say the news media do a good job covering science. This is consistent with earlier assessments of coverage of specific science topics, notably [childhood vaccines](#), but stands in contrast to other more negative general assessments of the news media, such as [their impact on the country](#).

At the same time, sizable shares of the public see problems in news coverage of scientific research

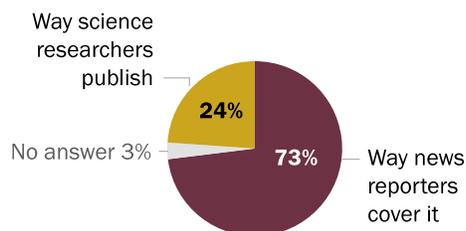
Americans hold mixed evaluations of how the news media cover science and see problems in coverage stemming from a range of players, including the public itself

% of U.S. adults who say the following

The news media do a __ covering science

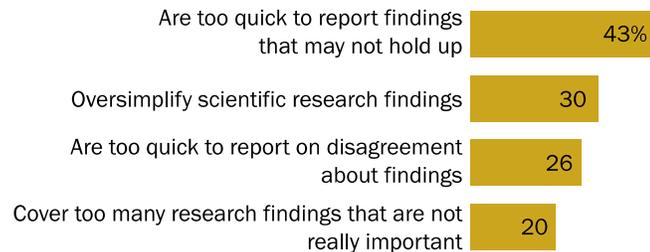


The bigger problem with news about scientific research findings is the ...

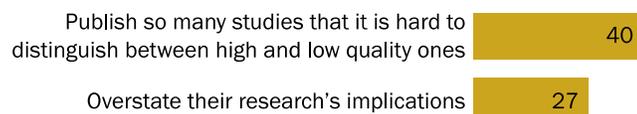


% of U.S. adults who say each of the following is a big problem when it comes to news about scientific findings

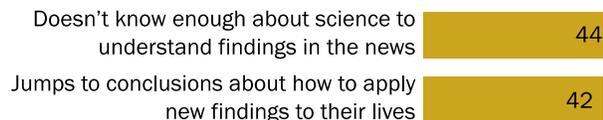
The news media ...



Science researchers ...



The public ...



Note: Very good/bad job and somewhat good/bad job responses are combined. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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stemming from the media and from researchers, as well as the public themselves, though less than half name any of eight potential problems as major ones. Still, when pressed to choose, nearly three-quarters of the public (73%) says the way the news media cover scientific research is a bigger problem than how researchers publish and share their findings (24%).

Twice as many social media users distrust science posts on these sites than trust them

Social media – a [now prominent way](#) in which people encounter and share news and information, particularly among [younger Americans](#) – appear to play a modest role in informing Americans about science news. Most social media users see science-related content but only a quarter (25%) see “a lot” or “some” science posts on these sites, and only a third (33%) consider it an important way they get science news.

What’s more, about twice as many social media users say they mostly *distrust* rather than trust the science posts they see on these sites. This finding is in line with internet users’ very low assessment of the [trustworthiness of information](#) more generally that they see on social media.²

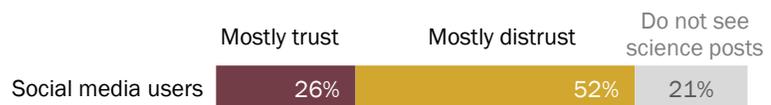
Still, about a quarter of social media users (26%) say they follow science related pages and accounts. And this group places both more importance and comparatively more trust on science news that comes to them through social media.

A minority of Americans turn to family and friends for science news

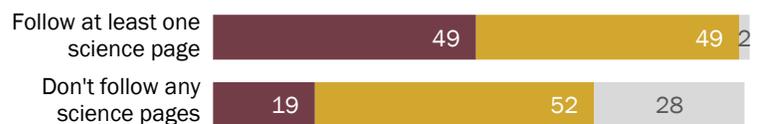
Another social aspect of science news – interactions with family and friends – also plays a relatively modest role. A third (33%) of Americans say they regularly get their science news from family and friends, and even fewer (17%) talk with others about science news at least weekly, far

Only about a quarter of social media users trust these platforms as a source of science news

% of social media users who say they ___ the posts they see about science



Among those who ___ on social media



Note: Based on U.S. adults who use social media. Respondents who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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² The role of social media on public awareness and views about science issues is likely complex; for a summary see National Academies of Sciences, Engineering and Medicine. 2015. [“Trust and Confidence at the Interfaces of the Life Sciences and Society: Does the Public Trust Science? A Workshop Summary.”](#)

lower than shares found in past surveys focused on [talking about news](#) generally or discussions of [politics](#).

And, just 16% of Americans perceive their family and friends to be accurate sources of science news, far fewer than say general news outlets and most specialty sources get the facts right about science news most of the time. This finding is broadly consistent with a [2016 report](#) that shows that more Americans perceive the news they get online from news organizations to be accurate than say the same of people they are close with online.

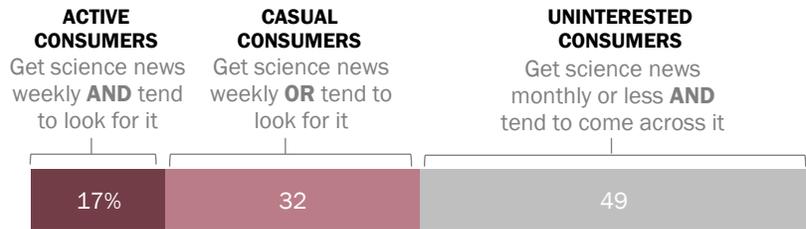
A core group of active science news consumers track an array of niche sources and tend to engage in science activities

A small but active group of science news consumers is embedded within the general public; they are distinctive in how they use and evaluate science news.

Roughly one-in-six U.S. adults (17%) both get science news at least a few times a week and tend to seek it out.

About one-in-six U.S. adults are active science news consumers

% of U.S. adults who are each type of science news consumer

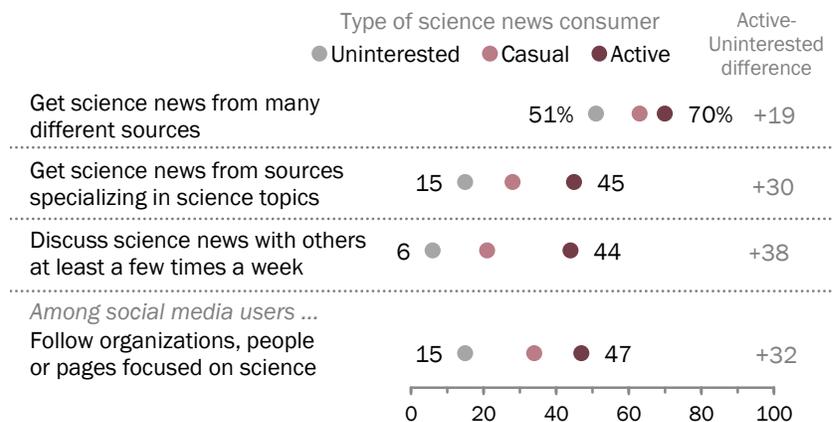


Note: Respondents who did not give an answer to either question are not shown. Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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Active science news consumers rely on a wider range of sources and discuss science news more often

% of U.S. adults in each group who say they ...



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who gave other responses or who did not give an answer are not shown. Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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These active science news consumers enjoy following science news more than news on other topics, turn to more types of science news providers, are more likely to discuss science with others, and of those on social media are more likely to follow science pages or accounts.

This group also has a greater tendency to think that each of the nine source types asked about in the survey is accurate. More than seven-in-ten active science news consumers say science and technology museums (74%), science documentaries (73%) and science magazines (72%) get the facts right most of the time. In contrast, minorities of uninterested science news consumers think [each of these sources](#) is accurate more than half the time.

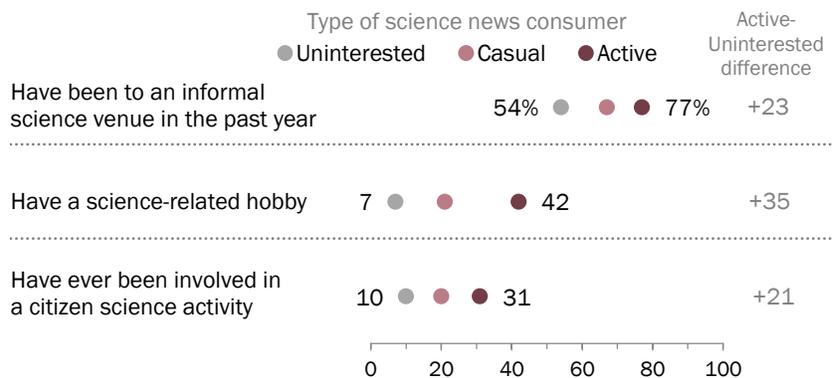
Active science news consumers are more likely than other Americans to have been to a park, museum or other informal science learning venue in the past year, to have a science-related hobby, and to have participated in a citizen science activity such as collecting data samples or making observations as part of a science research project.

This group tends to be more educated and to have higher incomes. Men are more likely than women to be active science news consumers (22%

vs. 12%, respectively), consistent with men’s somewhat higher level of interest in science news. But there are no differences by age and no more than modest differences by race or ethnicity in the share of active science news consumers.

Active science news consumers participate more in science activities and citizen science research

% of U.S. adults in each group who ...



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who gave other responses or who did not give an answer are not shown. Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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Republicans and Democrats are equally likely to be active science news consumers, but Democrats are more likely to think the media do a good job covering science

Despite wide political divides in views connected with [climate change](#), [energy](#), and [funding for science research](#), as well as over [trust in news about government and politics](#) more generally, there are few differences between political party groups in how people consume science news.

Republicans and Democrats (including independents who lean to each party) are equally likely to be active science news consumers (17% and 18%, respectively). And, roughly seven-in-ten of each party says they are very or somewhat interested in science news. The vast majority of both groups say they often or sometimes consume science-related entertainment media, whether about criminal investigations, medical shows or science fiction.

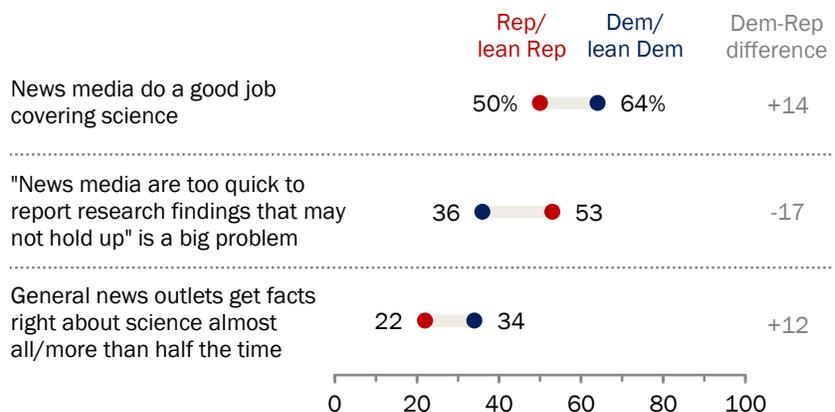
Political divides emerge in judgments about science news. Roughly two-thirds of Democrats (64%) say the news media do a very or somewhat good job in covering science, while Republicans are more evenly divided.

And, when asked about potential problems in coverage of scientific research a larger share of Republicans (53%), especially conservative Republicans, find fault with media coverage, saying it is a big problem that the news media are “too quick to report research findings that may not hold up.” Just 36% of Democrats say the same.

By the same token, Democrats (34%), especially liberal Democrats, are more likely to think that news outlets covering a range of topics get the facts rights about science most of the time than are Republicans (22%).

Political differences over media’s handling of science

% of U.S. adults in each group who say the following...



Note: Very/somewhat good job responses are combined. Respondents who gave other responses to each question or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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Science-related entertainment media reaches most Americans

Medical and forensic television shows and movies – such as Grey’s Anatomy, House and the CSI franchise – have popularized diverse fields of scientific research. And, science fiction shows and movies, a now commonplace genre in entertainment offerings, capture the public imagination – as well as that of [some inventors](#) – with a portrait of what could be.

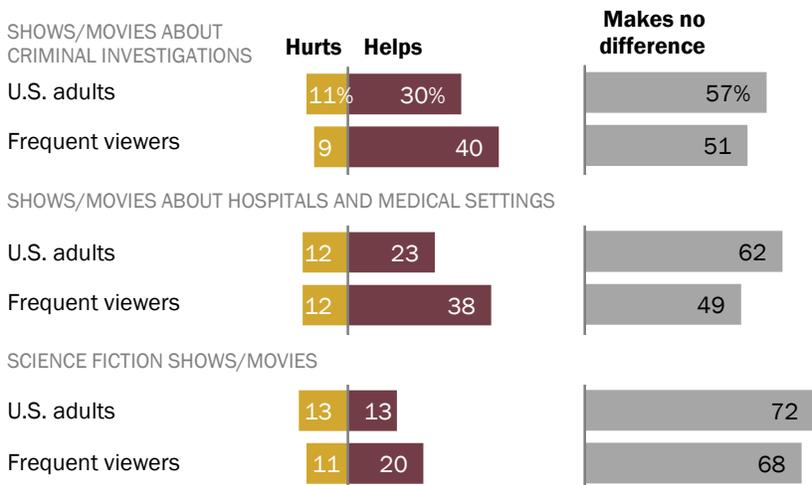
In contrast with science news consumption, a wide swath of Americans see science-related content through entertainment media. Fully 81% of U.S. adults say they watch one or more of these types of programming (shows or movies about criminal investigations, hospitals and medical settings, or science fiction) at least sometimes.

Many in the scientific community have worried over how such media influence public impressions of, support for and understanding of science.³

The new Pew Research Center survey finds that while most Americans believe such sources sacrifice realism for entertainment, most Americans believe such shows and movies do no harm to their understanding of science; and more people think such shows and movies help rather than hurt their understanding.⁴

Most Americans think entertainment media help or do no harm to their understanding of science

% of U.S. adults who say each of the following types of science shows and movies ___ their understanding of science, technology and medicine



Note: Frequent viewers are those who see each type of show or movie often or sometimes. Respondents who did not give an answer are not shown.
Source: Survey conducted May 30-June 12, 2017.
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³ Kirby, David A. 2017. “The Changing Popular Images of Science.” In Hall Jamieson, Kathleen, Dan M. Kahan and Dietram A. Scheufele, eds. “The Oxford Handbook of The Science of Science Communication.”

⁴ For another approach to measuring the effects of entertainment media exposure on science understanding see Dudo, Anthony, Dominique Brossard, James Shanahan, Dietram A. Scheufele, Michael Morgan, and Nancy Signorielli. 2011. “Science on Television in the 21st Century: Recent Trends in Portrayals and Their Contributions to Public Attitudes Toward Science.” Communication Research.

Further, the survey finds viewers of science-related entertainment believe that these films and shows provide, on the whole, a positive impression of working in science, technology and medicine. For example, 56% of Americans who watch shows about criminal investigations at least sometimes say these programs give a positive impression of working in science, technology and medicine; by contrast just 9% of these frequent viewers say the shows and movies create a negative impression, a third (33%) say they give a neutral impression.

Informal science venues and activities

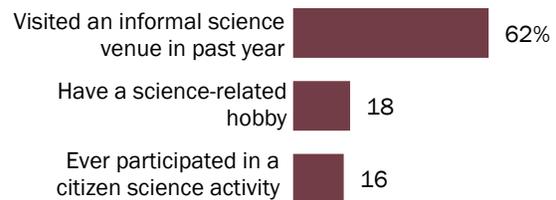
Most Americans (62%) have encountered science information in the past year at an informal learning venue such as a park, zoo, or science and technology museum, including majorities of those with and without minor age children.⁵

About two-in-ten adults (18%) have a science-related hobby or interest such as outdoor and naturalist activities, astronomy, computer programming and technology-related hobbies.

And about one-in-six Americans (16%) say they have participated in a [citizen science](#) research activity, whether helping to collect data samples for a science research project, contributing to an online crowdsourcing activity, or participating in a maker movement or hack-a-thon.

Many Americans encounter science in other venues of everyday life

% of U.S. adults who ...



Note: Visits to informal science venues based on those who have been to any of five informal science venues. Citizen science activity based on those who have done any of three activities. Respondents who did not do each or who did not give an answer are not shown. Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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Those with higher levels of education and income are more likely to participate in each of these kinds of science activities, consistent with past studies.⁶ As noted above, active science news consumers are more likely to have been to an informal science venue, to have a science-related hobby, and to have participated in a citizen science activity. Younger adults (ages 18 to 29) are modestly more likely than older adults to have done these things.

⁵ See Cain, Victoria and Karen A. Rader. 2017. "Science Communication and Museums' Changing Roles." In Hall Jamieson, Kathleen, Dan M. Kahan and Dietram A. Scheufele, eds. "The Oxford Handbook of The Science of Science Communication."

⁶ See National Science Board. 2014. "[Chapter 7. Science and Technology: Public Attitudes and Understanding.](#)" "Science and Engineering Indicators 2014."

1. Most Americans express curiosity in science news, but a minority are active science news consumers

About seven-in-ten Americans express at least some interest in science news – in fact, they report greater interest in science stories than news about business, entertainment and even sports, though more report interest in local and government news.

But regardless of interest levels, a minority (36%) of the public gets science news regularly, and most encounter it by chance rather than actively searching for it. Taken together, one-in-six adults (17%) both get science news regularly and seek it out, whereas about half (49%) get science news infrequently and primarily happens upon it.

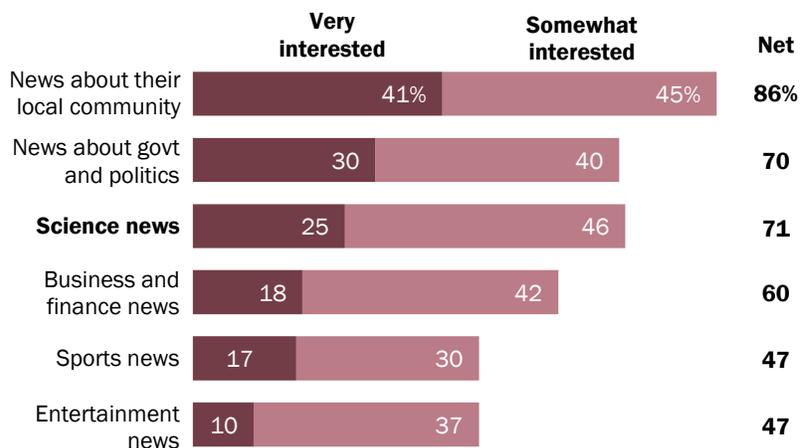
Most Americans have at least some interest in science news, though only one-in-four are very interested

Science news garners a fair amount of interest among Americans. About seven-in-ten (71%) have at least some interest in the news topic, though far fewer (25%) say they are very interested.

Overall, of the news topics asked about, interest in science falls somewhere in the middle. More Americans are very interested in local (41%) and political news (30%) than are very interested in science news, but science outpaces business (18%), sports (17%) and entertainment news (10%).

Most Americans have at least some interest in science news

% of U.S. adults who say they are ___ in each news topic



Note: Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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These findings track with previous Pew Research Center surveys in [2016](#) and [2014](#) as well as surveys on behalf of the National Science Board.⁷

Additionally, about half of Americans (52%) express enjoyment in science news over other topics, – though only 8% say they do a lot more.

Within science news, Americans are most interested in health and medicine

Science spans a wide range of subject areas. Of seven specific science topics asked about, five of them garner interest from at least half of Americans. But one stands out from the others: health and medicine. Seven-in-ten Americans express interest in health and medicine, with nearly three-in-ten (28%) rating it as the science news topic they are most interested in.

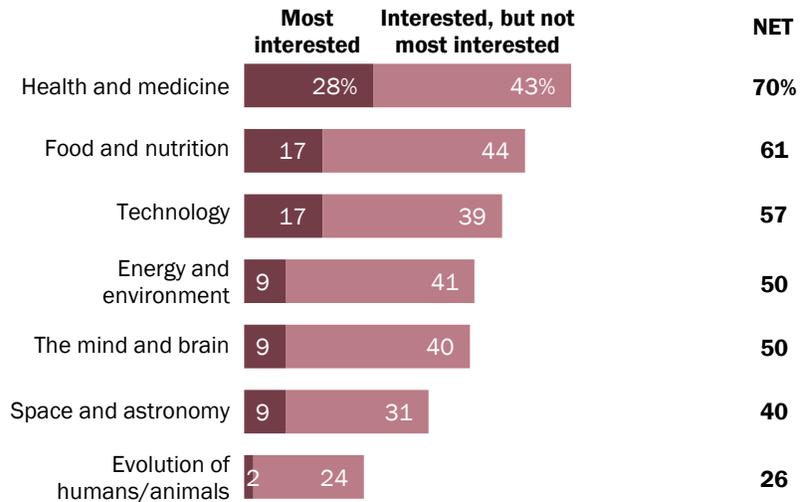
Health and medicine is followed by food/nutrition and technology – each chosen as the most interesting topic by 17% of U.S. adults. Fewer name energy and environment, the

mind and brain, and space and astronomy as the topic that interests them most (9% each), while just 2% say this of evolution and 1% mention some other science topic.

Overall, the vast majority of Americans express interest in at least one of the seven specific science news topics. But when asked about the science news they get, about half (49%) say they follow just a couple of science news topics.

Health, food and technology are science news topics with highest level of interest

% of U.S. adults who say they are ___ in each science news topic



Note: Respondents who are not interested in each topic or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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⁷ See National Science Board. 2016. "[Chapter 7. Science and Technology: Public Attitudes and Understanding](#)" "Science and Engineering Indicators 2016."

Interest in science news higher among men and the more educated

Across demographic groups, the higher educated and men exhibit greater levels of interest in science news. About four-in-ten (38%) of those with postgraduate degrees and 32% with college degrees are very interested, compared with a quarter or less of those who have some college education or less. Men are also more likely than women to be very interested (30% vs. 20%).

Differences emerge as well in interest in the specific science news topics. Women are more likely to be most interested in health, nutrition and the mind, whereas men favor technology and astronomy. Younger Americans are more likely to show an affinity for technology, whereas their elders prefer health-related subjects. Those with at least college degrees are more likely to name technology as their favorite topic. And while Democrats and Democratic-leaning independents are somewhat more likely to say energy and environment is a science topic of interest to them, few in either party consider this a topic of “most interest” (11% of Democrats/leaning Democrats and 6% of Republicans/leaning Republicans). For more details see [Appendix A](#).⁸

⁸ Similar patterns by gender, age, education and party groups in expressed interested in science and technology topics were found in a [2014 Pew Research Center survey](#).

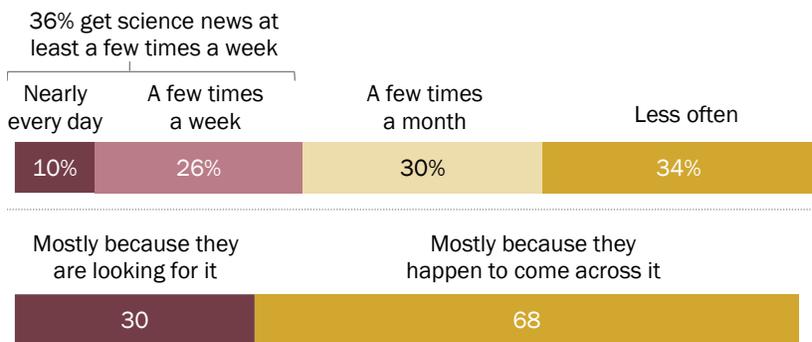
About one-in-six adults (17%) actively seek out science news and consume it at least a few times a week; most get science news infrequently and happen upon it

While most Americans show at least some interest in science news, this doesn't translate into high levels of active science news consumption.

The survey examined the intensity of science news consumption in two ways – frequency of consumption and whether people seek it out. The results show that a greater portion of Americans tend to be more passive than active in their science news habits.

Most Americans get science news infrequently and tend to happen upon it

% of U.S. adults who say they get science news ...



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

Source: Survey conducted May 30-June 12, 2017.

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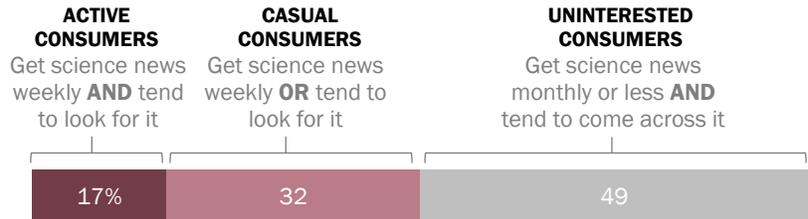
Most Americans are not frequent consumers of science news. About two-thirds (64%) get news about this topic a few times a month or less. The remaining 36% get news more often, with just one-in-ten doing so nearly daily.

And when Americans do get science news, most do so by happenstance. Nearly seven-in-ten (68%) get their science news mostly because they happen to come across it, while three-in-ten mostly do so because they look for it. Americans tend to be more passive in how they get science news than they are about news more generally; [a 2016 Pew Research Center report](#) found that when Americans are asked about how they get their online news, 44% said they mostly seek out their news online, whereas 55% mostly happen upon it.

Taken together, a minority of Americans (17%) are what can be termed “active science news consumers,” those who seek out science news *and* get it at least a few times a week. About half (49%) of U.S. adults, on the other hand, are “uninterested science news consumers” – they get science news infrequently and mostly come across it. The remaining 32%, the “casual science news consumers,” fall somewhere in the middle; they either frequently get science news *or* seek it out, but not both.

17% of Americans are active science news consumers

% of U.S. adults who are each type of science news consumer



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

Source: Survey conducted May 30-June 12, 2017.

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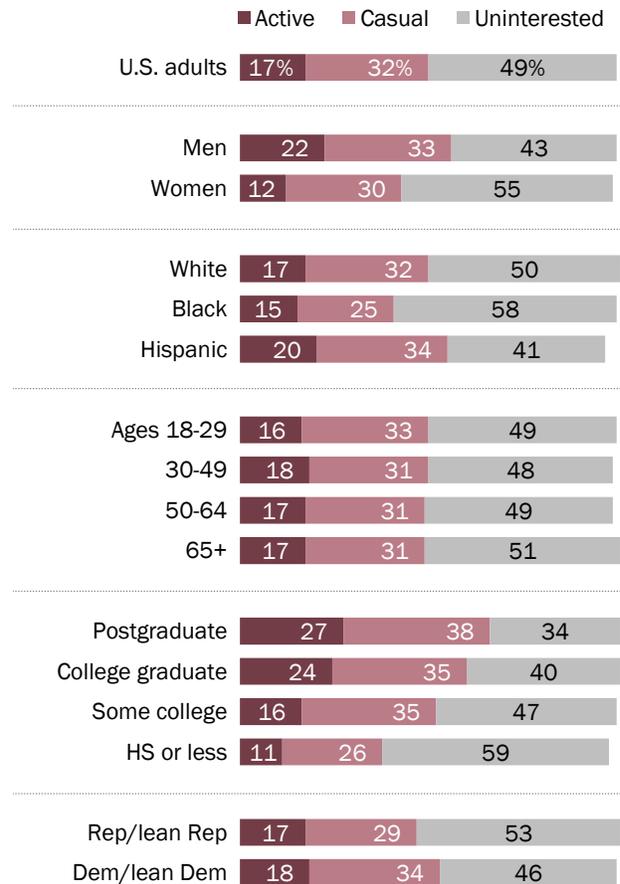
Similar to interest levels, the two demographic groups that stand out for being somewhat more likely to be active science news consumers are men and the more educated. About a quarter of those with postgraduate degrees (27%) and those with college degrees (24%) are active consumers, compared with 16% of those with some college education and about one-in-ten (11%) of those with high school diplomas or less.

Men are also more likely than women to be active consumers (22% vs. 12%, respectively), consistent with their higher level of interest.

There are no differences by age or political party identification in the share of active science news consumers, though Republicans and independents who lean to the GOP are slightly more likely to be uninterested science news consumers than are their Democratic counterparts.

Active science news consumers are more likely to be men, college grads

% of U.S. adults who are ___ science news consumers



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Whites and blacks are non-Hispanics only. Hispanics are of any race. Respondents who did not give an answer to either question are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Curiosity is a key driver for why people get science news; most parents cite children's interests as a reason

When U.S. adults are asked about why they follow science news, curiosity outpaces any other reason. About eight-in-ten adults (81%) cite their curiosity about what's happening in science as a reason that they follow news on the topic, with 39% saying it's a major reason.

Other reasons cited by smaller majorities are that science news helps them make decisions about their everyday lives and that they enjoy talking about science with others.

Additionally, parents tend to cite their children's interests and activities as a reason; some 61% of parents with children under 18 say this, with nearly a quarter (24%) saying it's a major reason they follow science news.

Overall, more called each of these a "minor" rather than a "major" reason they follow science news.

Curiosity is most common reason for following science news

% of U.S. adults who say that each is a major or minor reason for why they follow news about science

	A major reason	A minor reason	NET
Curious about what's happening in science	39%	42%	81%
Helps make decisions about everyday life	18	39	57
Enjoy talking about science with others	15	42	56
Related to activities, hobbies or interests	15	35	50
Feel a social or civic obligation to be informed	13	35	48
Among parents:			
Related to their children's interests or education	24	38	61
Among employed:			
Related to their job	14	23	37

Note: Respondents who said each was not a reason or who did not give an answer are not shown.

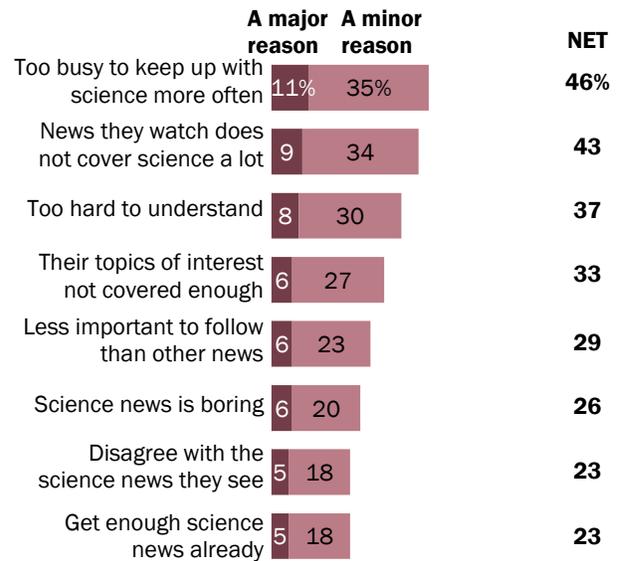
Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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On the flip side, there are many factors that discourage Americans from following science news more often. Though, of eight possible reasons asked about, none is cited by a majority as even a minor reason. The two most common reasons why people don't follow science news more frequently are that they are too busy (46%) or because the sources they regularly follow don't cover science a lot (43%).

A host of reasons, but none primary, for why people don't follow science news more

% of U.S. adults who say that each is a major or minor reason for why they don't follow science news more often



Note: Respondents who said each was not a reason or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.
"Science News and Information Today"

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Science news is not a particularly social experience

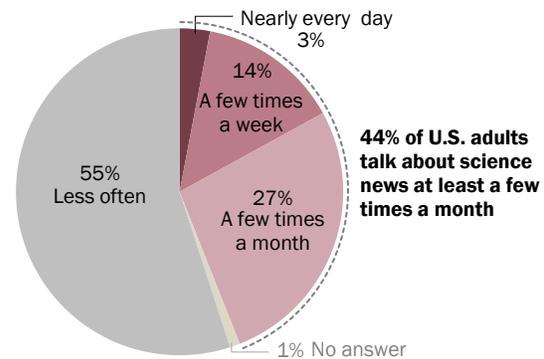
Few Americans have regular discussions about science news topics with their friends, family and acquaintances. The majority of Americans (55%) say they discuss science news less than a few times a month, while just 14% do so a few times a week and 3% do daily. This finding is in line with the fact that only a minority of adults actively consume science news.

Americans seem to discuss science news with others less than they do other forms of news. A [2016 Pew Research Center report](#) found that 73% of Americans discuss news generally – whether about science or some other topic – at least a few times a week. And [in March 2016](#), nearly six-in-ten (59%) U.S. adults said they had talked about government and politics with others at least a few times a week.

Additionally, most people who discuss science news with some regularity (i.e., “at least a few times a month”) do not consider themselves drivers of these conversations. Nearly two-thirds, 63%, of those who discuss science news at least a few times a month say they usually listen more than lead conversations about science news, while only 36% of this group says they see themselves as leading these conversations. Similarly, more than half (54%) of those who discuss science news at least a few times a month say they typically turn to others for science news, compared with 44% of this group who say that others typically turn to them for science news.

Less than half of Americans talk about science at least a few times a month

% of U.S. adults who say they discuss science news ...



And a minority of those who do discuss it are drivers of these conversations

Of the 44% of U.S. adults who say they discuss science news at least a few times a month,

the % who tend to ___ the conversations



the % who typically ___ for science news



Note: Figures in top half are based on all U.S. adults. Figures in bottom half are based on those who discuss science news at least a few times a month. Respondents who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

PEW RESEARCH CENTER

Active science news consumers much more likely to enjoy science news, cite a number of reasons for following it, and talk about it with others

Active science news consumers stand out for their high interest in science news and the ways they consume it. An overwhelming majority (88%) of active science news consumers say they enjoy following science news more than other types of news; this compares with 63% of casual consumers and just one-third (33%) of the uninterested consumers.

Active science news consumers are especially likely to cite curiosity as a motivating factor for following science news; nearly every active consumer (97%) cites it as a reason, with 77% saying it's a major reason. And most say they follow science news about a lot of different science topics.

Finally, this group is particularly likely to have conversations about science news. Fully 44% of active science news consumers report talking about science news with others at least a few times a week, about twice that of casual consumers (21%) and far more than the uninterested science news consumers (6%). This group of active consumers is also much more likely to see themselves as the drivers of these conversations. Most active science news consumers who discuss science news with some regularity (61%) say that others turn to them for science news — in contrast to 42% of casual and 29% of uninterested science news consumers who discuss science news at least a few times a month. Similarly, about half of active science news consumers who discuss science news with some regularity (47%) say they lead more than listen in these conversations, compared with 35% of casual and a quarter (25%) of uninterested science news consumers who have these conversations at least a few times a month.

Active news consumers far more likely to discuss science news with others

% of U.S. adults who say they discuss science news with others at least a few times a week

U.S. adults 17%

TYPE OF SCIENCE NEWS CONSUMER

Active 44

Casual 21

Uninterested 6

Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

PEW RESEARCH CENTER

2. General news outlets are the most common science news source; most-seen stories highlight discoveries and “weird” findings

Even as news has diversified into multiple types of platforms and niche outlets, the general news media play an important role in providing the public news about science.⁹ This is true for active science news consumers as well, though they are more likely to also turn to specialty outlets.

Beyond the topics of science news, the most common science stories people see are reports on new discoveries, followed by stories about “strange or weird” research findings.

General news outlets outpace other sources for science news

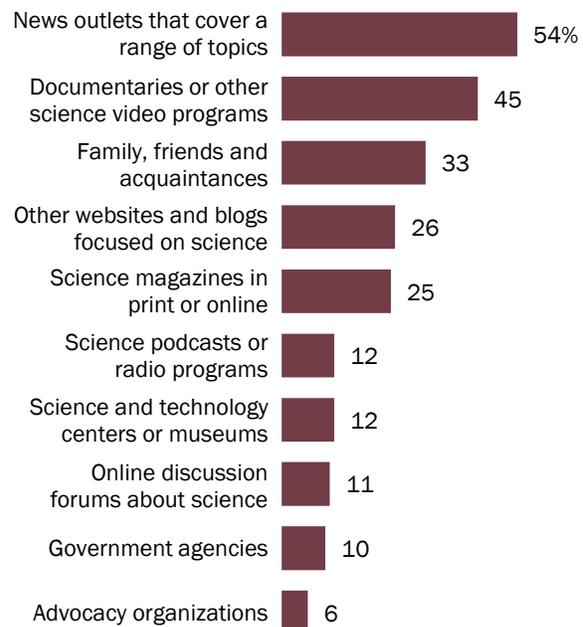
More Americans rely on news outlets that cover a range of topics for science news than on specialty outlets.

When asked whether they rely more on general news outlets or specialty outlets for science news, 72% of Americans say general news sources; 24% say they get most of their science news from specialty sources.

A similar propensity towards general news outlets emerges when asking more specifically about 10 different types of sources for science news. Some 54% of Americans regularly get science news from outlets that cover a range of topics. The next most common source is documentaries or other science video programs (45%), while roughly one-quarter of

A majority of the public get science news through general news sources

% of U.S. adults who say they regularly get their science news from ...



Note: Respondents who did not select each source or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

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⁹ For more on the changing science news landscape see Schafer, Mike S. 2017. “How Changing Media Structures Are Affecting Science News Coverage.” In Kathleen Hall Jamieson, Dan M. Kahan and Dietram A. Scheufele, eds. “The Oxford Handbook of The Science of Science Communication.” Also see Brossard, Dominique. 2013, “New media landscapes and the science information consumer.” “Proceedings of the National Academy of Sciences,” vol. 110, supplement 3.

Americans rely on websites and blogs focused on science (26%) or science magazines (25%). Far fewer Americans regularly rely on science specialty radio programs or podcasts (12%), science and technology museums (12%), online discussion forums about science (11%), government agencies (10%) or advocacy organizations (6%) for science news.

There is an ongoing concern, particularly in the medical and public health communities, about the extent to which the public attends to alternative medical information, rather than conventional sources. When asked separately about these types of sources, just 8% of Americans say they regularly get science news from “sources that provide alternative perspectives to conventional science or medical research.”

Many of these sources for science news and information – general news outlets, specialty sources, and alternative sources – can also be reached via social media. Most social media users (79%) say they see science-related posts there, even if not very many. A detailed analysis of people’s use of social media for science news and information can be found in [Chapter 4](#).

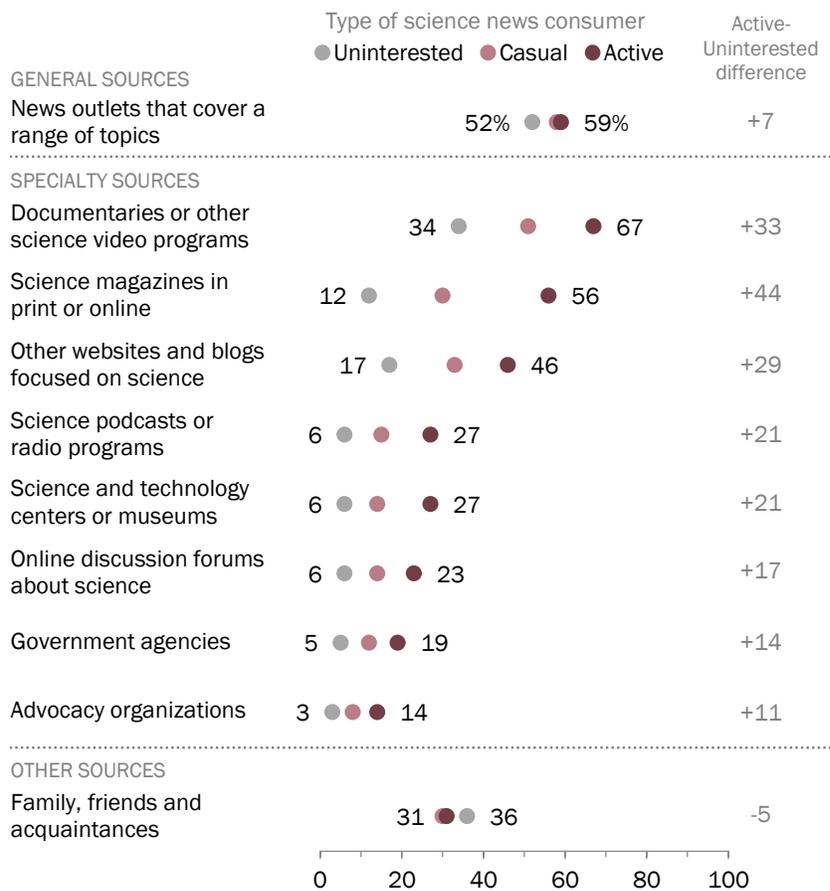
Most Americans commonly rely on general news outlets, but active science news consumers also tend to rely on specialty sources

Active science news consumers are much more likely to rely on specialty sources than casual and uninterested consumers – but, even among this group, a 54% majority say, overall, they mostly rely on general news outlets for science news, while 45% say they get most of their news from science specialty outlets. By far, the majority of casual (71%) and uninterested science news consumers (81%) rely on general news sources for most of their science news.

When asked separately about 10 specific source types, similar shares of active, casual and uninterested science news consumers say they regularly get science news from news outlets that cover a range of topics and from family and friends. But active consumers rely more heavily on specialty science sources than do either casual or uninterested science news consumers. For example, active science news consumers are roughly two times more likely than uninterested news consumers to regularly get science news from documentaries or video programs (67%, compared with 34%). They are also much more likely to frequently get science news from science magazines and science-focused websites and blogs.

Most rely on general sources for science news; active news consumers more likely to go to specialty outlets

% of U.S. adults who say they regularly get their science news from ...



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who did not select each source or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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Active science news consumers get their science news from more source types. On average, active science news consumers regularly get their news from 3.7 out of 10 source types considered in the survey, compared with 2.7 among casual consumers and 1.8 among uninterested science news consumers.

Finally, as with other news sources, active science news consumers are also more likely to rely on sources that provide alternative perspectives to conventional science or medical research (19%) than either casual (8%) or uninterested science news consumers (4%).

Most Americans say they see news about scientific discoveries and about half see strange research findings

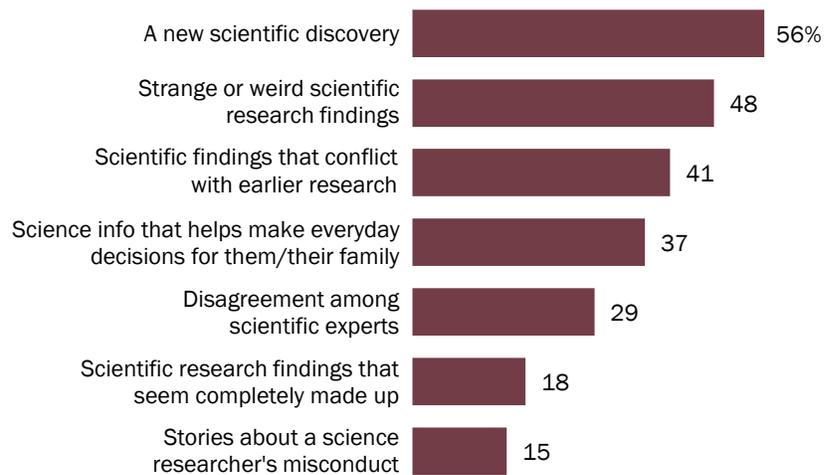
Science news covers a wide range of scientific fields whether biology, medicine, physics or something else. Some have criticized science journalism for too much emphasis on “gee-whiz” writing that, while enticing, gives too little attention to [the relevance of science for the average person](#) or [the quality of the research](#).

The data here indicate that there is a bit of both going on. Most Americans (56%) see scientific discoveries, and more than a third of Americans (37%) say they see science news stories that help them make decisions about everyday life for themselves and their family.

Still, about half (48%) see science news articles about “strange or weird scientific research findings.”

Most Americans say they have seen news stories about scientific discoveries

% of U.S. adults who say they ever read, watch or listen to news stories that report ...



Note: Respondents who did not select each category or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

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When asked to describe a recent science news story that helped them make everyday decisions, the most frequent topics mentioned were about medicine and health stories followed by food and nutrition stories. For example, one respondent mentioned a radio program about the shingles vaccine led them to get vaccinated and another mentioned a story about a correlation between eating red meat and propensity for chronic disease that led them to change their eating habits. A smaller share of those seeing such stories mention stories about climate change and the environment leading to decisions in their everyday life.

Science news also sometimes contains contradictory information or notes disagreement among scientific experts. Some 41% of Americans report having seen news stories with scientific information that conflicts with earlier findings on the same topic. About three-in-ten Americans (29%) have seen news stories noting disagreement among scientific experts; among this group, climate change stories are most commonly cited (32%).

Fewer U.S. adults report seeing science news stories about a science researcher's misconduct (15%) or about scientific research findings that seem completely made up (18%). Those that have seen this kind of story mentioned a number of topics including climate change, extraterrestrials and a variety of other topics.

There are no more than modest differences across demographic and educational groups in the types of science news seen. Further, there are only modest differences between Republicans and Democrats (including independents who lean to each party, respectively) in the kinds of science stories encountered. For example, 32% of Republicans say they see news that reports disagreement among scientific experts, as do 27% of Democrats. Some 22% of Republicans say they see news reports about scientific research that seem completely made up – only modestly higher than the 16% of Democrats who say the same.

Americans see medicine and health, food- and nutrition-focused articles as helpful in their everyday life decisions

Among the 37% of U.S. adults who say they ever read, watched or listened to science news stories with scientific information that helps them make decisions about everyday life, the % who say the most recent science news story they saw on this topic was about ...

MOST COMMON RESPONSES
BY CATEGORY

SAMPLE RESPONSES

Medicine and health	23%	<p>"A radio program that featured doctors speaking about vaccines. I listened to the latest information concerning the shingles vaccine and I chose to get the vaccine based on the information."</p> <p>"I watched a documentary about health and immune systems and decided to give my family supplements."</p>
Food and nutrition	16%	<p>"I read an article summarizing a study showing a correlation with red meat consumption and a variety of chronic disease[s]. As a result, I decided that my family would eat less red meat."</p> <p>"I heard more about the chemicals in produce and started trying to buy more organic products."</p>
Climate, energy and environment	16%	<p>"Global warming issues and the threat of the U.S. not being serious about joining with the rest of the world in efforts to slow this process. It causes me to do what I can in my family."</p> <p>"All the stories about 'island of plastics' floating in the oceans have made me be a fanatic recycler of all plastic materials."</p>
Space and astronomy	3%	<p>"Solar eclipse this coming August. If daycare for my older child doesn't make pinhole cameras, my husband and/or I will take the day off to do it and watch the eclipse."</p> <p>"Certain planets would be visible at a certain time. We went out to look."</p>
Technology	3%	<p>"I saw a report on driverless cars, and talked with my wife about our long term car plan."</p> <p>"News stories about new technology (robots, self-driving cars, reusable rockets) stimulating family investment decisions."</p>
All other responses	7%	
Don't know/No answer	32%	

Note: Based on those who said they have ever seen science news with information that helps them make decisions about everyday life for them and their family. Verbatim responses are coded into categories; figures in the table are based on combining related codes into NET categories. Figures add to more than 100% because multiple responses were allowed.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Climate change, extraterrestrials are commonly cited topics of science news stories Americans have seen that seemed completely made up

Among the 18% of U.S. adults who said they ever read, watched or listened to science news stories that report scientific research findings that seem completely made up, the % who say the most recent science news story they saw on this topic was about ...

MOST COMMON RESPONSES BY CATEGORY

SAMPLE RESPONSES

Climate change, global warming	14%	<p>"Article claiming global warming is overblown and melting ice is a reaction to ice buildup from the 1970s."</p> <p>"Global warming. There is no obvious link to prove that humans have a significant factor in the change of the global climate."</p>
Space, extraterrestrials	9%	<p>"There was something recently about a star behaving bizarrely ... the articles mentions of the possibility of aliens [affecting] the star's light seem like click-bait."</p> <p>"The infinitesimal possibility that the mere existence of a bacteria on Mars could possibly mean there was once life there."</p>
Life sciences, evolution	5%	<p>"Article extolling creationism."</p> <p>"Anything related to evolution."</p> <p>"It was a discovery of a new kind of fish that could transform under pressure in the water – it was pretty ridiculous."</p>
Food and nutrition	5%	<p>"... the study saying how red meat basically gives you cancer. That felt completely made up to me."</p> <p>"Coffee consumption prevents cancer."</p>
Medicine and health	4%	<p>"That the mercury used to lengthen the shelf life of immunizations (vaccinations) caused autism."</p> <p>"The latest therapy that gold nano-particles can cure cancer."</p> <p>"It seems like everything today gives you cancer, most recent baby powder."</p>
Supernatural and mythical creatures	4%	<p>"Sightings of big foot."</p> <p>"Live documentary of mermaids."</p>
Energy, environment	2%	
Technology	1%	
Political	1%	
All other responses	9%	
Don't know/No answer	43%	

Note: Based on those who said they have ever seen science news stories that report scientific research findings that seem completely made up. Verbatim responses are coded into categories; figures in the table are based on combining related codes into NET categories. Figures add to more than 100% because multiple responses were allowed.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Climate change is the most commonly cited topic of stories Americans have seen about disagreements among scientific experts

Among the 29% of U.S. adults who said they ever read, watched or listened to science news stories that report on disagreements among scientific experts, the % who say the most recent science news story they saw on this topic was about ...

MOST COMMON RESPONSES
BY CATEGORY

SAMPLE RESPONSES

Climate change	32%	<p>"Constant disagreement between news outlets and the scientific community about how much of an effect humans have on climate change, particularly air quality."</p> <p>"I saw John Stossell interviewing two scientists who disagreed about the extent of the man-made cause of climate change. One felt man-made factors were 95% responsible. The other felt the influence of man on the climate was significantly lower than that."</p>
Medicine and health	8%	<p>"Supposed experts on vaccination debate, vs. the actual science of herd immunity through vaccination of the majority of the population."</p> <p>"Have read recently about conflicting views of vaccines."</p> <p>"Mostly about whether particular herbal or vitamin products were beneficial or a waste of money."</p>
Space and astronomy	7%	<p>"Whether or not Pluto is a planet."</p> <p>"Dispute regarding the age of Saturn's rings."</p> <p>"I don't remember the name or time of the article, but it was about the 'Big Bang Theory' and was disproving it, claiming that there is evidence that the universe is infinite without beginning or end (unlike the Big Bang which believes there was the start of the universe and its borders are continuing to expand.)"</p>
Food and nutrition	6%	<p>"The ongoing GMO food 'debate.'"</p> <p>"Several: One was about how much water humans need to drink every day. Some say eight glasses, some say six, some way it doesn't matter as long as you eat plenty of veggies, fruit and drink other beverages. There is some disagreement about cholesterol, the amount of eggs you can safely consume and what LDL level is safe for people over 70 years of age."</p> <p>"Conflicting reports on the value of eating before exercise or after for full calorie burn and muscle growth."</p>
Life sciences, evolution	5%	<p>"... an old debate about creationism and evolution."</p> <p>"It was a story about some elephant, or mammoth bones that may or may not have been evidence that humans had tools many years before previously thought."</p>
Energy and environment	2%	
All other responses	7%	
Don't know/No answer	22%	

Note: Based on those who said they have ever seen science news stories that report on disagreement among scientific experts. Verbatim responses are coded into categories; figures in the table are based on combining related codes into NET categories. Figures add to more than 100% because multiple responses were allowed.

Source: Survey of U.S. adults May 30-June 12, 2017.

"Science News and Information Today"

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3. Niche information sources are most trusted to get the facts right about science

Americans offer a mixed evaluation of how well the news media cover science, but more say that overall they do a good, rather than a bad job. When delving more deeply, however, Americans show skepticism in the accuracy of general news outlets, instead placing more trust in specialty information sources. And, while many see problems in coverage of scientific research stemming from a range of players, when asked to choose, most Americans say the bigger problem stems from how reporters cover scientific research than from the way researchers publish their findings.

Most Americans say the media do a good job covering science news

A majority (57%) of U.S. adults say the news media are doing a good job covering science, while about four-in-ten (41%) say the news media are doing a bad job.

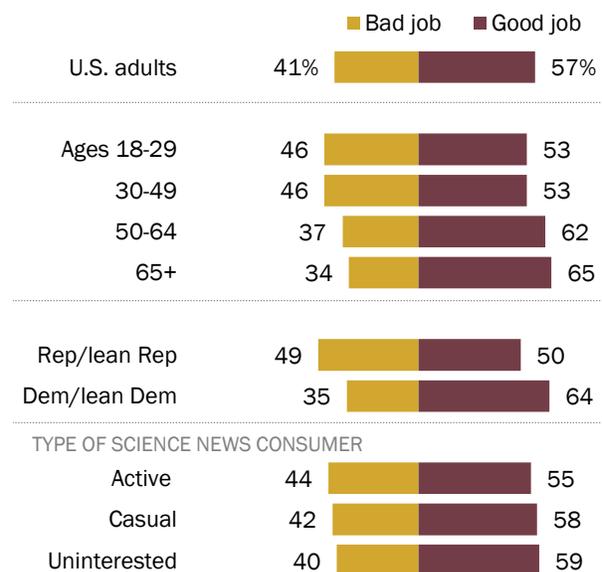
While this finding is in keeping with the relatively positive assessments in previous Pew Research Center surveys of how the media cover specific science topics, notably [childhood vaccines](#), it stands in contrast to the mostly negative views Americans hold of how the [news media](#), generally, affect the country.¹⁰

Democrats and independents who lean to the Democratic Party are more likely than Republicans and those leaning Republican to say the news media are doing a good job (64% vs. 50%). This political difference is in line with [general assessments of the news media](#).

Older Americans are modestly more likely than their younger counterparts to say news media are doing a good job covering science

A majority thinks the news media are doing a good job covering science

% of U.S. adults who say the news media do a _____ in covering science



Note: Very good/bad job and somewhat good/bad job responses are combined. Type of science news consumer based on frequency they get science news and whether they tend to look for it or come across it. Respondents who did not give an answer are not shown. Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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¹⁰ A [2013 Pew Research Center report](#) documents the steep decline in public regard for media accuracy, fairness and independence over about three decades. Public confidence in the news media reached a historic low in 2016, according to [Gallup surveys](#) conducted since 1997.

(65% of those ages 65 and older say the news media is doing a good job, compared with 53% of those younger than 50).

When it comes to rating the accuracy of science information, however, Americans are most likely to say niche science sources get the facts right.

At the top for accuracy are science and technology museums, documentaries or other science video programs, and science magazines, each of which roughly half of Americans say get the facts right most of the time (either “almost all” or “more than half” of the time).

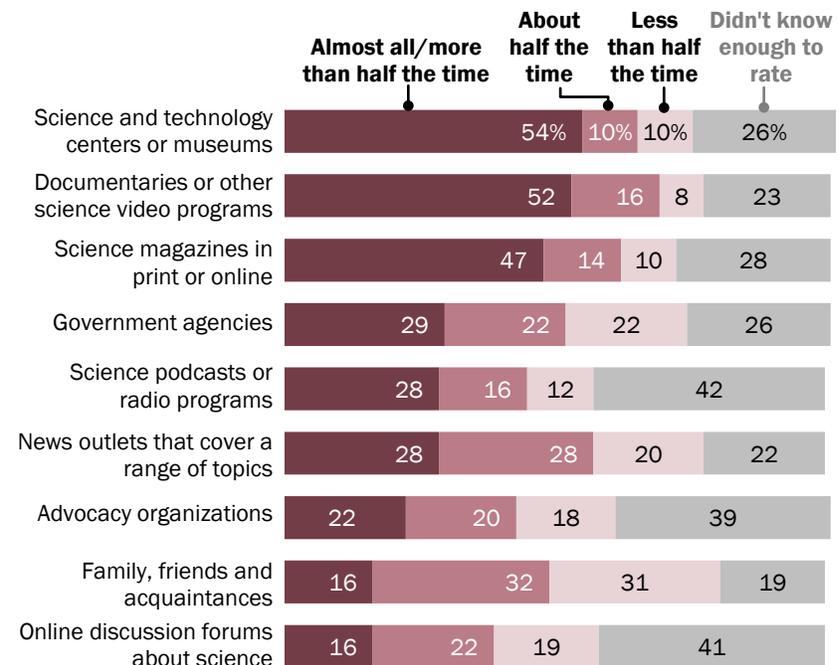
Next are the trio of government agencies, science radio/podcasts and general news outlets, which about three-in-ten adults say get the facts right most of the time. Although far more Americans (42%) acknowledge they don’t know enough about science audio programs to rate their accuracy. Among those who were knowledgeable about such radio/podcasts, the balance of opinion is these programs get the facts right more than half or almost all the time (51% of those who gave an opinion), which would outpace both government and general news outlets.

Still, it is family and friends and online discussion forums that sit at the bottom. Only

one-in-six U.S. adults (16%) say their family and friends get the facts rights about science almost all or more than half the time, while about twice as many (31%) say their family and friends are

Americans most likely to say science museums, documentaries and magazines get the facts right

% of U.S. adults who say each of the following gets the facts right _____ when it comes to science



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

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

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accurate less than half the time. Similarly, 16% of U.S. adults say online discussion forums get the facts right about science most of the time, though about four-in-ten (41%) say they did not know enough about these sources to give an opinion.

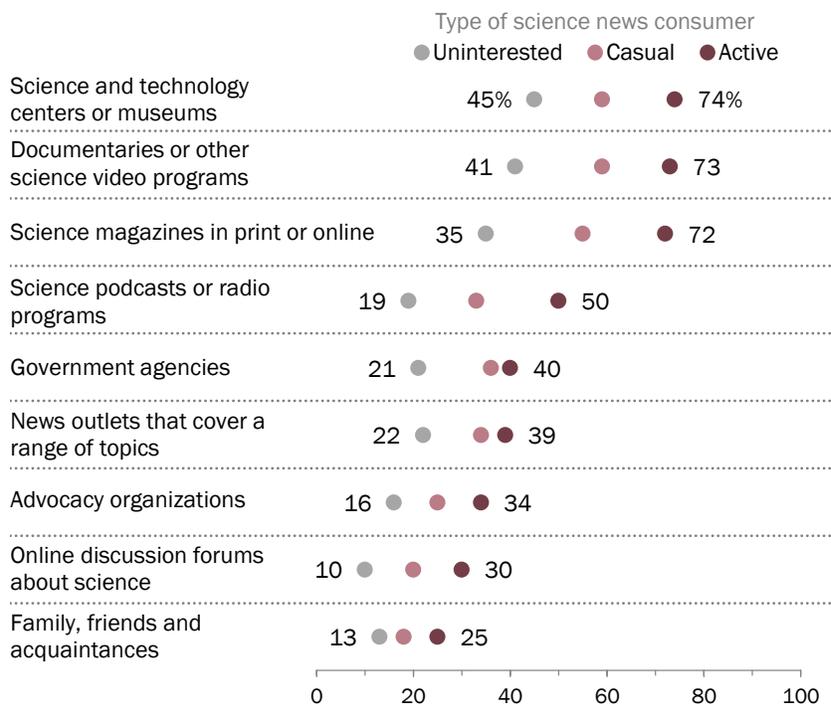
Active science news consumers see information sources as more accurate; political differences in views of accuracy are less pronounced

Overall, majorities of active (55%), casual (58%) and uninterested (59%) science news consumers say the news media are doing a good job covering science. But when it comes to the individual sources types, active science news consumers generally have greater trust in the accuracy of each of the sources asked about than do casual and uninterested science news consumers. And particularly large differences emerge among the types of science news consumers when they are asked to rate niche science sources.

About three-quarters (74%) of active science news consumers say science and technology museums, documentaries, and science magazines get the facts right most of the time. In contrast, no more than half of uninterested science news consumers think each of these sources is accurate more than half the time. This

Active science news consumers especially likely to say science museums, documentaries and magazines get the facts right

% of U.S. adults who say each of the following get the facts right almost all/more than half of the time



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who gave other responses or who did not give an answer are not shown.
 Source: Survey conducted May 30-June 12, 2017.
 "Science News and Information Today"

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pattern also holds when accounting for the greater familiarity that active science news consumers have with many of these sources.

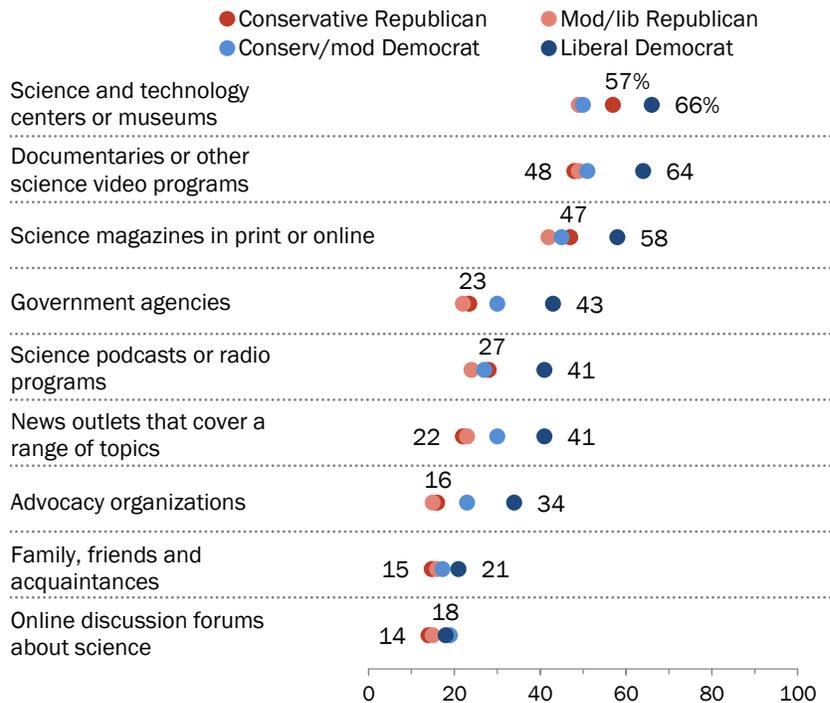
When it comes to science information, liberal Democrats stand out as more likely to trust both general and niche sources for accurate science information.

Similarly, 41% of liberal Democrats say news outlets that cover a range of topics get the facts right about science most of the time, compared with 22% of conservative Republicans.

Political differences tend to be smaller than differences between types of science news consumers, however.

Liberal Democrats put more trust in information sources to get the facts right about science

% U.S. adults who say each of the following get the facts right almost all/more than half of the time



Note: Republicans and Democrats include independents and other non-partisans who “lean” toward the parties. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017. “Science News and Information Today”

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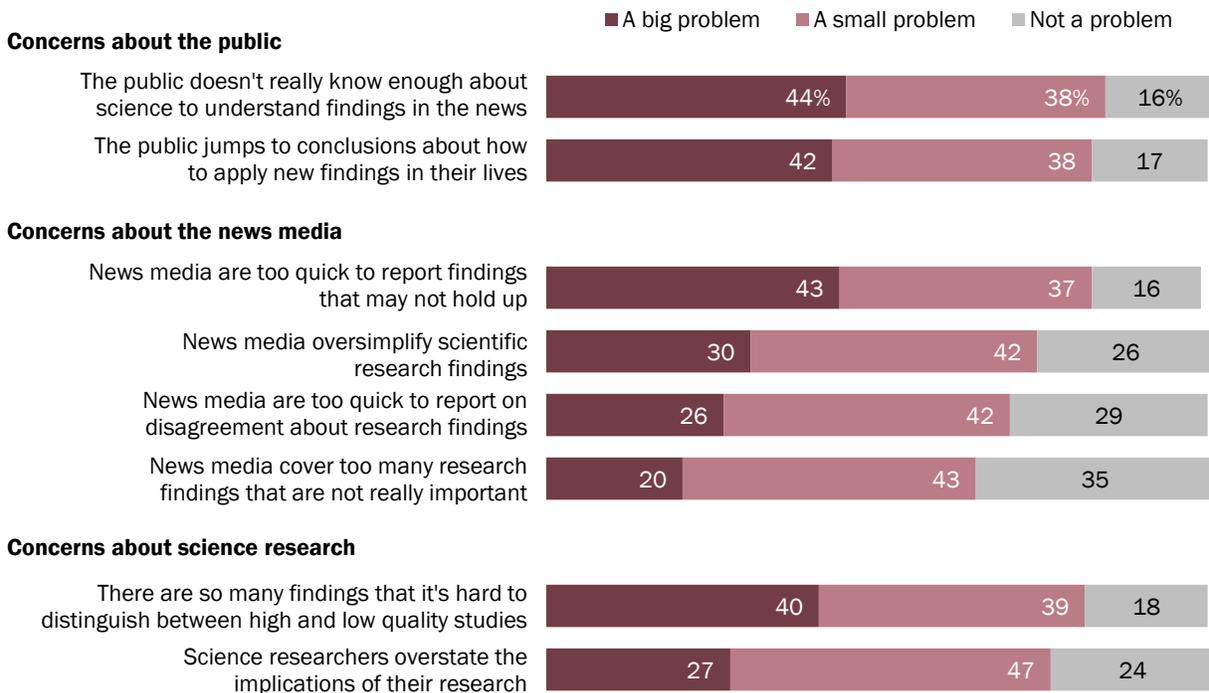
Many Americans see problems in coverage of scientific research stemming from scientists, the news media and themselves

Americans see a range of problems in how scientific research is disseminated and understood, but they spread the blame across themselves, the news media and scientific researchers.

Many Americans say the public's limited knowledge about science – as well as the way the public interprets science news – are problems. Some 44% of Americans say it is a big problem that the public doesn't really know enough about science to understand research findings in the news. At the same time, 42% of U.S. adults say the public's tendency to jump to conclusions about how to apply new research findings is a big problem.

Americans see problems in coverage of scientific research stemming from scientists, the news media and themselves

% of U.S. adults who say each of the following is ...



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

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Still, a similar share of Americans express concern about how the media report on scientific research: 43% of U.S. adults say it is a big problem that the news media are “too quick to report research findings than may not hold up.” A smaller share (30%) says that media oversimplifying scientific research is a big problem, while another 42% say this is a small problem.

Many Americans also believe that researchers affect the quality of science news coverage. For example, four-in-ten Americans (40%) say it is a big problem that there are so many research studies being published that it is hard to distinguish between high- and low-quality studies.

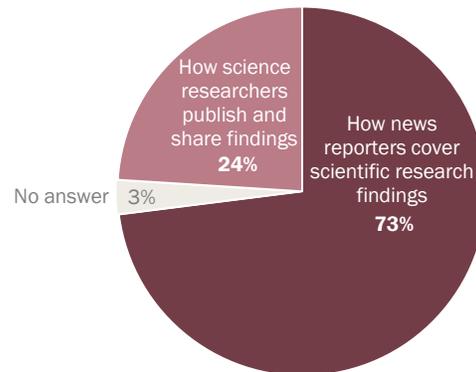
Conservative Republicans and liberal

Democrats are about equally likely to consider the public not knowing enough about science to be a big problem for coverage of scientific research. But, conservative Republicans are more likely than liberal Democrats to name every potential problem stemming from news coverage or scientific research as a big problem. For example, more than half (57%) of conservative Republicans think it is a big problem that the news media are too quick to report findings that might not hold up, compared with 38% of liberal Democrats. For details, see [Appendix A](#).

When asked, however, to choose whether the *bigger* problem rests in how media cover research or how researchers publish or share their findings, many more Americans put the onus on the media than on scientific researchers (73% vs. 24%), as do large majorities of both conservative Republicans (80%) and liberal Democrats (74%).

Most Americans say reporters, rather than scientists, are the bigger problem when it comes to science coverage

% of U.S. adults who say ___ is the bigger problem when it comes to news about science research findings



Source: Survey conducted May 30-June 12, 2017.
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4. Most Americans see at least some science posts on social media but tend to distrust what they see

Social media are a prominent source of [online news](#) that allow Americans to curate the types of information they see on a daily basis. But social media appear to play a modest role in how Americans stay informed about science. While most social media users see posts about science on these sites, a smaller core of users see a sizeable quantity of posts or actively follow science pages.

Social media platforms are proving themselves to be value-added sources of science information for some. Among social media users, 44% say they at least sometimes see science news they wouldn't see elsewhere. But, many are also highly skeptical of the news they are seeing. Only about a quarter (26%) of social media users say they mostly trust the science posts they find on these sites, compared with twice that (52%) who mostly distrust them.

Most social media users see science-related posts but fewer follow social media pages about science

About seven-in-ten Americans say they use social media, a figure that has gone up steadily [over the past decade](#). Among that group, 79% (55% of all U.S. adults) report seeing science-related posts on social media – but only 25% see “a lot” or “some” science posts, while about half (53%) see “not many” (21% of users see no posts about science).

A minority of Americans are actively seeking science information on social media. About a quarter (26%) of social media users (18% of U.S. adults) say they follow any pages or accounts that focus on science.

Most social media users see science posts; 26% follow science pages

% of social media users who say they ...

See ___ science posts on social media



Follow *any* science pages or accounts



Note: Based on U.S. adults who use social media. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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Few say social media are a primary avenue for science news

One third of social media users (33%) say that these sites are the *most* important (6%) or an important way (28%) that they get science news; 45% say social media are not very important in how they get science news.

Younger adults are more likely to rely on social media for their science news. Roughly four-in-ten social media users ages 18 to 49 (41%) consider this an important way they get science news, compared with 22% of social media users ages 50 or older.

An ongoing question about social media is whether they amplify news also seen in other venues or expose users to new content. The survey finds 44% of social media users see content unique to that platform at least sometimes, though 8% say they do so often. A smaller share of users, 34%, say what they see on these platforms is hardly ever or never something they would not have seen elsewhere.

About two-in-ten social media users (18%) say they follow accounts that “provide alternative perspectives to conventional science or medical research.” Most of these users say they also follow traditional science pages (13% of social media users follow both a science account and an “alternative” science account; 5% of users *only* follow an alternative account).

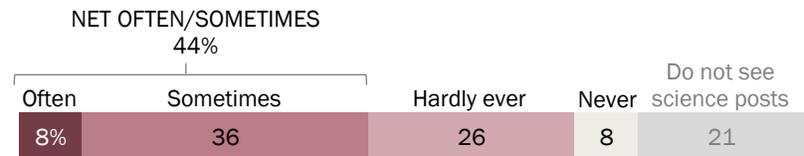
One third of social media users see these platforms as an important way they get science news

% of social media users who say that social media is ___ way they get science news



44% of social media users get science news there at least sometimes that they wouldn't see elsewhere

% of social media users who say they ___ see science news there that they wouldn't have seen elsewhere



Note: Based on U.S. adults who use social media. Respondents who did not give an answer are not shown.
 Source: Survey conducted May 30-June 12, 2017.
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Most social media users click through to articles about science news outside of the sites themselves; 54% at least sometimes go beyond the post, clicking on external links to science information but, as with seeing posts overall, few do this often (10%).

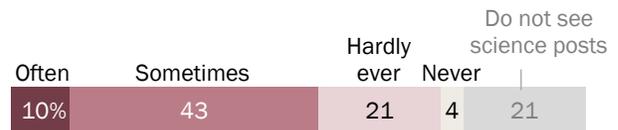
Many social media users see science-related posts, but about half distrust what they see

Most social media users are skeptical about the science content they see on these platforms. About a quarter (26%) of social media users say they mostly trust the science posts they see on these sites, compared with twice that (52%) who mostly *distrust* them.

The relatively low levels of trust is broadly in keeping with past studies by Pew Research Center on general news consumption; a [2016 survey](#) found internet users to be less trusting of news found on social media than they were of other sources, including local and national news outlets.¹¹

About half of social media users say they click through to science news stories

% of social media users who say they ___ click on links when they see science news posts



Note: Based on U.S. adults who use social media. Respondents who did not give an answer are not shown.

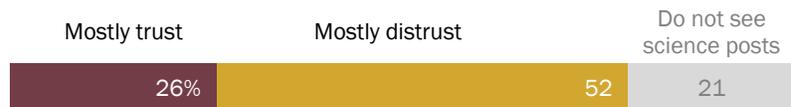
Source: Survey conducted May 30-June 12, 2017.

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Only about a quarter of social media users trust the science posts they see on social media

% of social media users who say they ___ the posts they see about science



Note: Based on U.S. adults who use social media. Respondents who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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¹¹ The role of social media on public awareness and views about science issues is likely complex; for a summary see National Academies of Sciences, Engineering and Medicine. 2015. "[Chapter: 5 Full Court Press: Trusted and Trustworthy Media.](#)" "Trust and Confidence at the Interfaces of the Life Sciences and Society: Does the Public Trust Science? A Workshop Summary."

Social media users report seeing stories about “weird” science and new discoveries as well as celebrities’ health remedies

In terms of the specific types of science information that people get on social media, “strange or weird” scientific findings and new scientific discoveries are, by far, the most common types of posts seen on these platforms.

About a quarter (27%) of social media users have seen health or medical advice from celebrities on social media, a phenomenon with the potential to both help and hurt public understanding on these topics.¹²

A similar share of users (26%) report seeing science posts that they disagree with or that seem completely made up (24%). The survey asked respondents about any of five possible responses they have to posts they see that seem made up. The most common way people respond is to search for more information or, to a lesser extent, ignoring or hiding the story.

Altogether, some 18% of social media users report taking any of five actions in response to science posts that seemed completely made up: commented on the story, searched for more information, shared the story to show that it is wrong, ignored or hid the story, or unfollowed/blocked the person or organization that originated the story.

Fewer social media users report seeing posts about scientific misconduct (7%) or disagreement among scientific experts (15%).

Weird science and new discoveries are the most common types of science posts seen on social media

% of social media users who say they see posts about ___ on social media

Strange or weird scientific research findings	39%
A new scientific discovery	37
Celebrities providing health or medical advice	27
Stories that they disagree with	26
Scientific research findings that seem completely made up	24
Scientific research findings that conflict with earlier findings	23
Scientific information that helps them make everyday decisions	21
Disagreement among scientific experts	15
Stories about a science researcher's misconduct	7

Note: Based on U.S. adults who use social media. Respondents who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

“Science News and Information Today”

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¹² See Fahy, Declan and Timothy Caulfield. 2016. “[Science, Celebrities and Public Engagement](#).” “Issues in Science and Technology.”

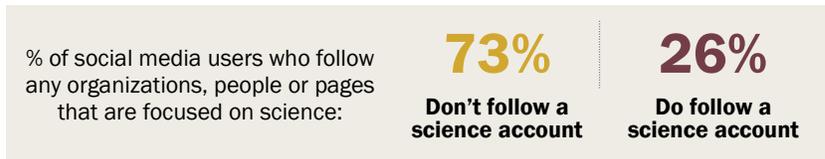
The 26% of social media users who follow science-related accounts are especially likely to see and trust science news on social media

There are wide differences among social media users in the degree to which they engage with science news on social media platforms and the value they find in social media as a source for science information. The 26% of social media users who follow at least one science account see more science content on social media – and, they are more likely to engage with science posts they see and to consider social

media an important source for their science news. Key differences between social media users who follow a science page and those who don't:

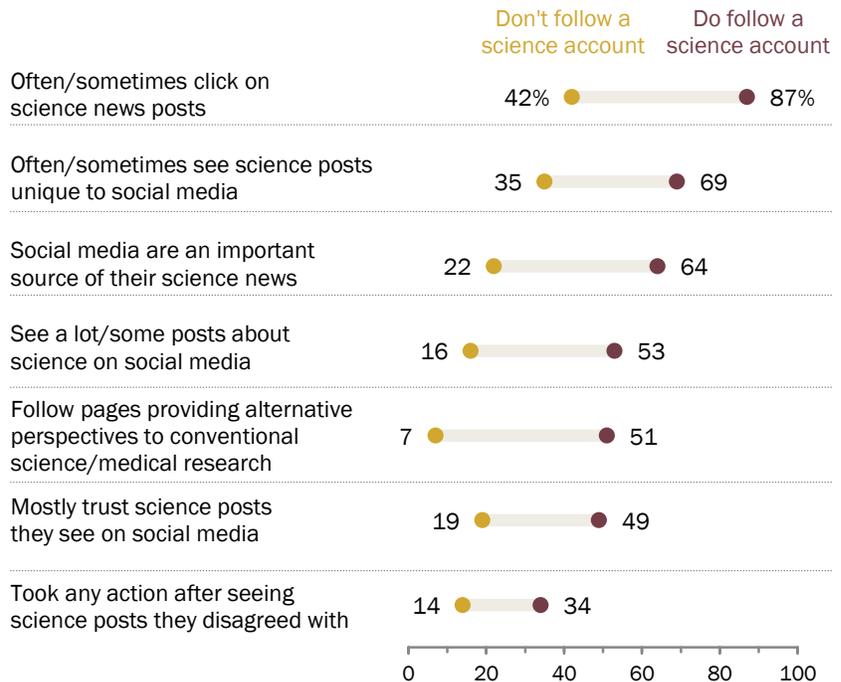
- Fully 87% of science account followers click on science posts for content either often or sometimes, compared with 42% of those who do not follow such pages.
- 64% of social media users who follow a science account consider social media an important source of their science news, compared with 22% of other social media users.
- Social media users who follow science accounts are more likely to report seeing stories they wouldn't have encountered elsewhere (69% say this occurs often or sometimes vs. 35% of

About a quarter of social media users follow science-focused organizations, people or pages



Those who follow a science account on social media are more engaged with science there

% of social media users in each group who say the following



Note: Based on U.S. adults who use social media. Responses for "social media are an important source of their science news" combines those saying "most important" and "important." Respondents who gave other responses to each question or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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social media users not following a science page).

- Those who follow science pages or accounts are closely divided over whether they mostly trust or distrust the science posts they see (49% to 49%). By contrast, 19% of those who do not follow science pages say they mostly trust the posts about science that they see there.
- When these more science-engaged social media users see posts they disagree with, they are more likely to report taking some kind of action in response. About a third (34%) of users following a science account have done at least one of the five actions considered in the survey: made a comment, searched for more information, shared the story to show that it is wrong, ignored or hid the story, or unfollowed/blocked the person or organization that originated the story. In contrast, just 14% of other social media users say they have done any of these things in response to a science post they disagreed with.

5. Most Americans see science-related entertainment shows and movies in either a neutral or positive light

Medical and forensic television shows – such as Grey’s Anatomy, House and the CSI franchise – have popularized how diverse fields of research, including DNA profiling, differential diagnosis and forensic anthropology, enable investigators to solve crimes and identify diseases. And, over the decades, inventors of the [mobile phone](#), [tablet computer](#), and even [spacecraft propulsion systems](#) have credited science fiction, like Star Trek, as the source of their ideas; this genre now is commonplace in entertainment media offerings.

Still, most Americans believe that science-related TV shows and movies focus more on entertainment than getting the facts right – an assessment that they apply to both science fiction and more “realistic” genres. And, although these programs and films frequently employ poetic license in their portrayal of science, viewers credit them with creating a favorable image of how science, technology and medicine work.

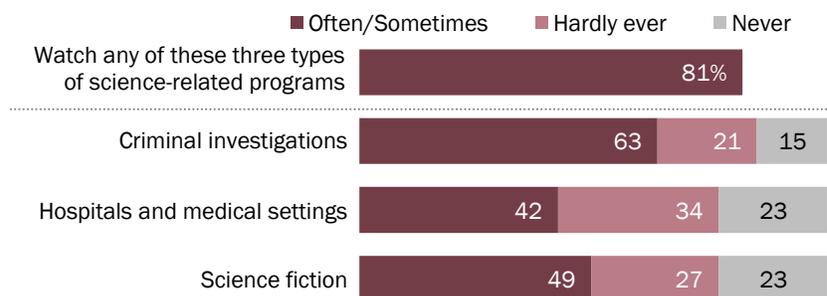
Science-related entertainment media draw a diverse audience

The vast majority of Americans watch science-related entertainment media. About eight-in-ten (81%) U.S. adults say they at least sometimes watch one or more of three types of shows and movies: criminal investigations, hospitals and medical settings, or science fiction. About two-in-ten (18%) say they hardly ever or never watch these three categories of entertainment.

People who watch these types of shows and movies at least sometimes encompass all demographic, educational and political groups. For example, a roughly equal share of men and women, as well as highly educated and less educated adults view at least one of these genres fairly regularly (i.e., “often” or “sometimes”). Further, 78% of uninterested

Most Americans watch some science-related entertainment media

% of U.S. adults who say they watch shows and movies of each type



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

Source: Survey conducted May 30-June 12, 2017.

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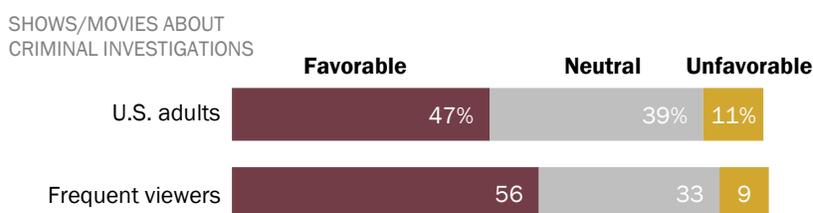
science news consumers report viewing one or more of these types of programs at least sometimes, as do 82% of casual and 90% of active science news consumers.

Viewers of science-related entertainment media tend to see such shows as giving a positive impression of work in science, technology and medicine

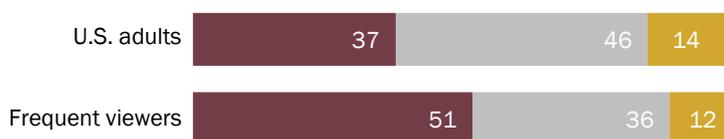
While popular entertainment can inspire and inform, it can also create misconceptions. Many in the scientific community have worried over how such media influence people's impressions of, support for, and understanding of scientific inquiry, knowledge and careers in these fields.¹³ For example, some express concern that Hollywood's portrayal of science creates unrealistic standards for criminal evidence in the public mind. Although studies about this "CSI effect" remain inconclusive,¹⁴ the issue was deemed serious enough to merit inclusion in a [report](#) published by the National Academies of Sciences, Engineering, and Medicine and helped launch an advisory [network](#) to connect scientists and engineers with entertainment industry

Most frequent viewers say crime shows and movies create a favorable image of working in science fields

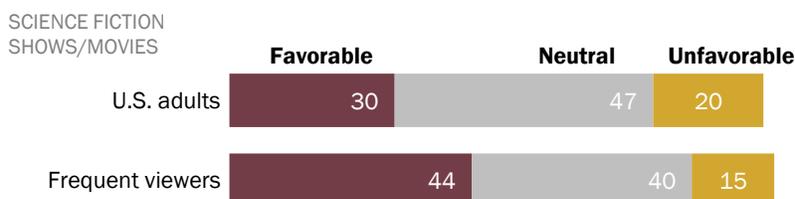
% of U.S. adults who say each of the following types of shows and movies gives a ___ impression of working in science, technology and medicine



SHOWS/MOVIES ABOUT HOSPITALS AND MEDICAL SETTINGS



% of U.S. adults who say science fiction shows and movies give a favorable impression of the future of science, technology and medicine



Note: Frequent viewers are those who see each type of show/movie often or sometimes. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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¹³ Kirby, David A. 2017. "The Changing Popular Images of Science." In Hall Jamieson, Kathleen, Dan M. Kahan and Dietram A. Scheufele, eds. "The Oxford Handbook of The Science of Science Communication."

¹⁴ Shanahan, James. 2017. "What Do We Know About the Entertainment Industry's Portrayal of Science? How Does It Affect Public Attitudes Toward Science?" In Hall Jamieson, Kathleen, Dan M. Kahan and Dietram A. Scheufele, eds. "The Oxford Handbook of The Science of Science Communication."

professionals.¹⁵

This study finds viewers of science-related entertainment believe that these films and shows provide, on the whole, a positive impression of working in science, technology and medicine. A majority of Americans (56%) who fairly regularly watch shows about criminal investigations say these programs give a positive impression of working in science, technology and medicine; by contrast just 9% say the shows and movies create a negative impression. A similar pattern occurs among viewers of shows focused on hospitals and medical settings. About half (51%) of those who watch such shows at least sometimes say they provide a positive image of working in science, technology and medicine; just 12% say they create a negative image.

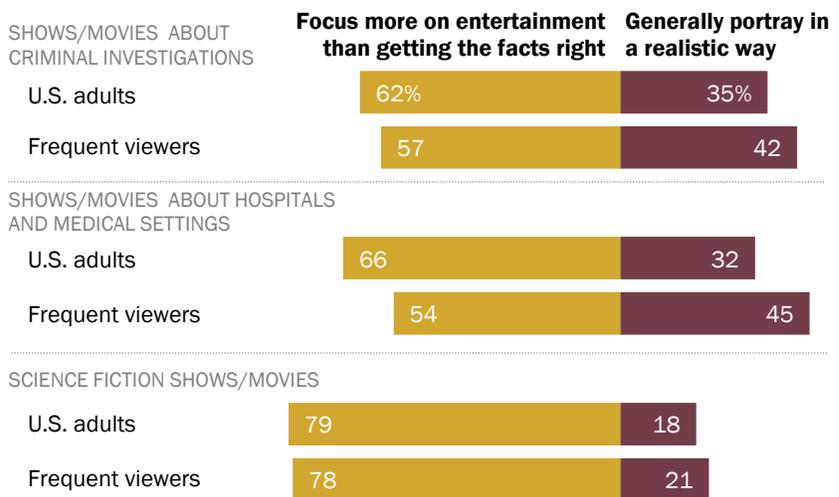
And, while science fiction sometimes presents a dystopian view of the future, 44% of Americans who fairly regularly watch such shows and movies say the genre offers a favorable impression of the future of science, technology and medicine. Only 15% of this group says science fiction creates an unfavorable impression, and four-in-ten say the overall impression is neutral.

When it comes to realistically portraying science, majorities of Americans say that each of these types of science-related entertainment tend to focus more on entertainment than on getting the facts right. For example, when it comes to science fiction, 79% say such shows focus more on entertainment, while only 18% say that these programs portray science, technology and medicine in a realistic way.

While such views might be expected with regards to

Most Americans think these shows and movies focus more on entertainment than being realistic

% of U.S. adults who say each of the following types of science shows and movies ...



Note: Frequent viewers are those who see each type of show or movie often or sometimes. Respondents who gave other responses or who did not give an answer are not shown. Source: Survey conducted May 30-June 12, 2017. "Science News and Information Today"

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¹⁵ Kirby, David A. 2011. "Lab Coats in Hollywood: Science, Scientists and Cinema."

science fiction – a genre that purposefully veers from reality – the public holds similar perceptions of crime and medical shows. By a margin of roughly two-to-one, Americans think medical-oriented shows and movies prioritize entertainment (66%) over accuracy (32%). Similarly, Americans say crime shows focus more on entertainment than portraying science, technology and medicine in a realistic way by a margin of 62% to 35%.

Most Americans see entertainment media as doing no harm; more say it helps than hurts their understanding of science, technology and medicine

A central question surrounding science-related entertainment is whether the tendency of this genre to take poetic license undermines public understanding of science. From the public's perspective, the answer appears to be no. Most Americans say that both crime and medical shows and movies have no particular effect on their understanding of science, technology and medicine; those who do are much more likely to consider the effect positive than negative.

About half of frequent viewers of crime-focused shows (51%) say these programs have no effect on their own

understanding of science,

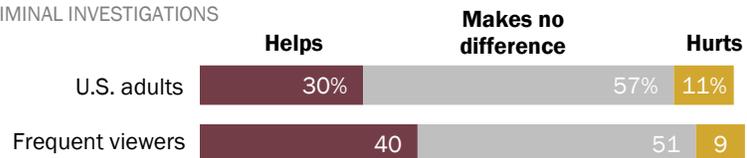
technology and medicine. More say these shows help than hurt their understanding by a margin of 40% to 9%.

Frequent viewers of medicine-oriented programs judge the effect of these shows on their own understanding in a similar way. About half of this group (49%) says these shows and movies make

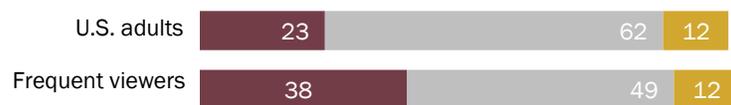
Larger shares say crime and medical entertainment help rather than hurt their understanding of science

% of U.S. adults who say each of the following types of science shows and movies _____ their understanding of science, technology and medicine

SHOWS/MOVIES ABOUT
CRIMINAL INVESTIGATIONS



SHOWS/MOVIES ABOUT HOSPITALS
AND MEDICAL SETTINGS



SCIENCE FICTION SHOWS/MOVIES



Note: Frequent viewers are those who see each type of show or movie often or sometimes. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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no difference to their own understanding of science, technology and medicine, 38% say these shows help and just 12% say these shows hurt their understanding.

When it comes to science fiction, nearly seven-in-ten (68%) of frequent viewers say these shows and movies make no difference to their understanding of science, technology and medicine.

6. Citizen science, science-related hobbies and participation in informal science activities

Participation in science-related activities serves as another source for informing the public. The past two decades have seen a resurgence in direct public engagement with science – especially through citizen science and crowdsourcing activities – as a way to learn about the process of scientific inquiry and foster a deeper dialogue around the relationships between science and society.¹⁶

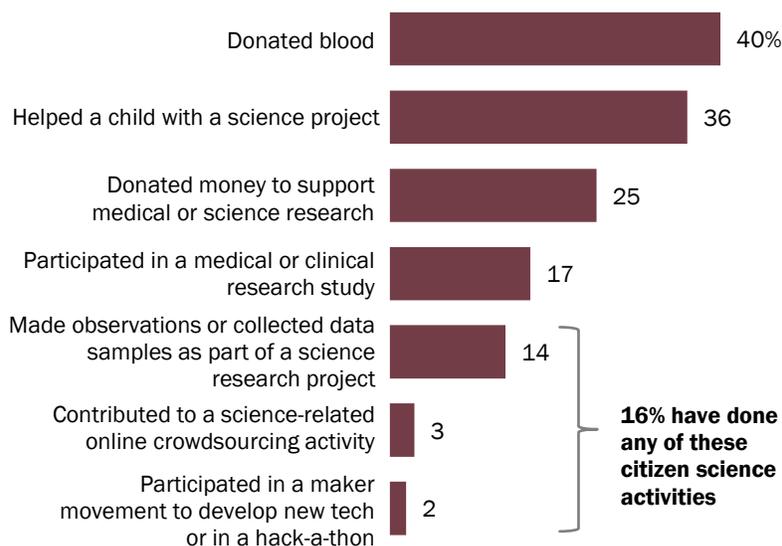
Citizen science encompasses a diverse range of activities, such as **birdwatching**, **weather monitoring**, processing and analyzing **astronomical data**, and do-it-yourself science projects.

Overall, 16% of U.S. adults report having done at least one of the following citizen science activities: made observations or collected data samples as part of a science research project, contributed to a science-related online crowdsourcing activity, or participated in a maker movement or hack-a-thon.

A similar share (17%) of adults have participated in a medical or clinical research study. One of the most common ways that Americans directly engage with medical care and research is by donating blood (40% of Americans say they have done this at least once). A quarter of Americans (25%) have donated money to support medical or science research.

About one-in-six Americans have contributed to a citizen science activity

% of U.S. adults who say they have ever...



Note: Respondents who did not do each of these or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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¹⁶ Bonney, Rick, Tina B. Phillips, Heidi L. Ballard, and Jody W. Enck. 2016. "Can citizen science enhance public understanding of science?" Public Understanding of Science. For an overview of informal science learning see, Sacco, Kalie, John H. Falk, and James Bell. 2014. "Informal Science Education: Lifelong, Life-Wide, Life-Deep." PLOS Biology . <https://doi.org/10.1371/journal.pbio.1001986>

Some 45% of parents with minor-age children (and 36% of all adults) have helped a child with a science project for school or an outside activity.

18% of Americans engage with science through hobbies, interests and activities at home

About one-in-five Americans (18%) report they have what they consider to be a “science-related hobby, interest or activity they do outside of work.”

Among the most popular:

- 5% of Americans pursue hobbies related to the environment and nature, such as outdoor and naturalist activities, gardening, and botany.
- 3% of Americans have interests in aviation or rocket building, astronomy, and star-gazing.
- 3% of Americans have technology hobbies, such as computer programming and robotics.

Science-related hobbies include naturalist pursuits, astronomy and tech

% of U.S. adults who say they have a science-related hobby, activity or interest outside of work

	U.S. adults 18%	Among those with hobby
Have a science-related hobby		
Environment and nature (e.g., outside activities, gardening, botany, birdwatching)	5	28
Astronomy, aviation	3	17
Technology, computers, electronics, machines	3	15
Health and wellness	1	8
Science experiments and research	1	8
Learning activities (reading, museums)	1	7
Food and home improvement	<1	2
Other	2	11
Don't know/No answer	1	8

Notes: Respondents listed up to three hobbies. Verbatim responses are coded into categories; figures in the table are based on combining related codes into NET categories.

Source: Survey of U.S. adults May 30-June 12, 2017.

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Most Americans have been to a park, museum or informal science event in the past year

There are a number of other ways people encounter science information in their everyday lives and, potentially, learn about science through informal environments.¹⁷ Visits to parks and museums are foremost among them.

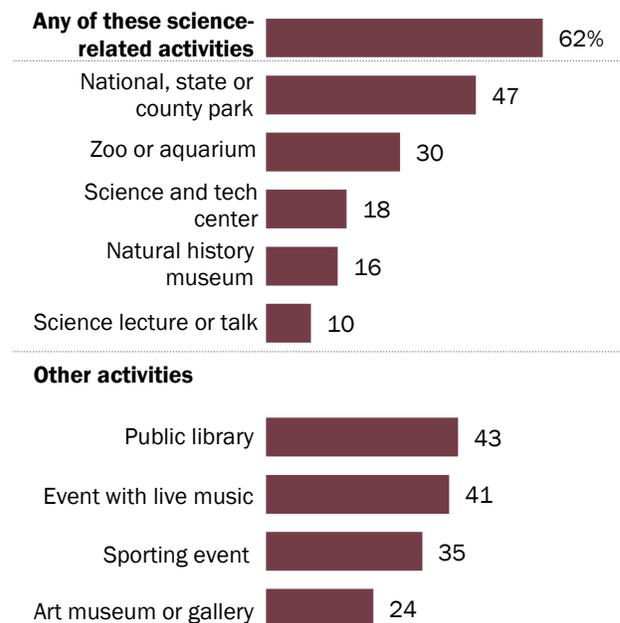
Altogether, 62% of U.S. adults have encountered science through one of these informal institutions or events in the past year: a national, state or county park (47%); a zoo or aquarium (30%); a science and technology center or museum (18%); a natural history museum (16%); or a science lecture (10%).

Participation in these science-related activities is common among parents with children under age 18 (69%) as well as those without minor-age children (59%).

By comparison, about four-in-ten Americans have been to a public library (43%) or an event with live music in the past year (41%). Fewer have been to a sporting event (35%) or visited an art museum or art gallery in the past year (24%).¹⁸

Most Americans have visited a park or other informal science venue in the past year

% of U.S. adults who say they have gone to each of the following in the past year



Note: Respondents who did not give an answer are not shown.
Source: Survey conducted May 30-June 12, 2017.
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¹⁷ For an overview see [Informal Science](#) from the Center for Advancement of Informal Science Education or the [National Informal STEM Education Network](#).

¹⁸ The General Social Survey (GSS) conducted by the NORC also asks Americans about visits to informal science and technology institutions. For example, the 2016 GSS found 48% of U.S. adults had visited a zoo, 27% had visited a science and technology museum and 30% had visited a natural history museum in the last year. Estimates from the GSS survey tend to be higher than those in this Pew Research Center survey for similar kinds of activities; these differences may be related to differences in both mode and question wording of the two surveys. The GSS survey is conducted face-to-face and asked respondents to provide the number of times they have visited each type of institution in the past year. By comparison, this survey was conducted online and asked respondents to select only which places they had visited in the past year.

Active science news consumers, the highly educated and more affluent are particularly likely to have a science hobby, participate in citizen science and other science-related activities

The 17% of Americans who are active science news consumers – saying they typically seek out science news and consume it at least a few times each week – are particularly likely to have participated in science-related activities. They are far more likely than uninterested news consumers to say they have a science related hobby (42% vs. 7%), to have participated in a citizen science activity (31% vs. 10%), or to have been to any of five informal science venues in the past year, such as a park or museum (77% vs. 54%).

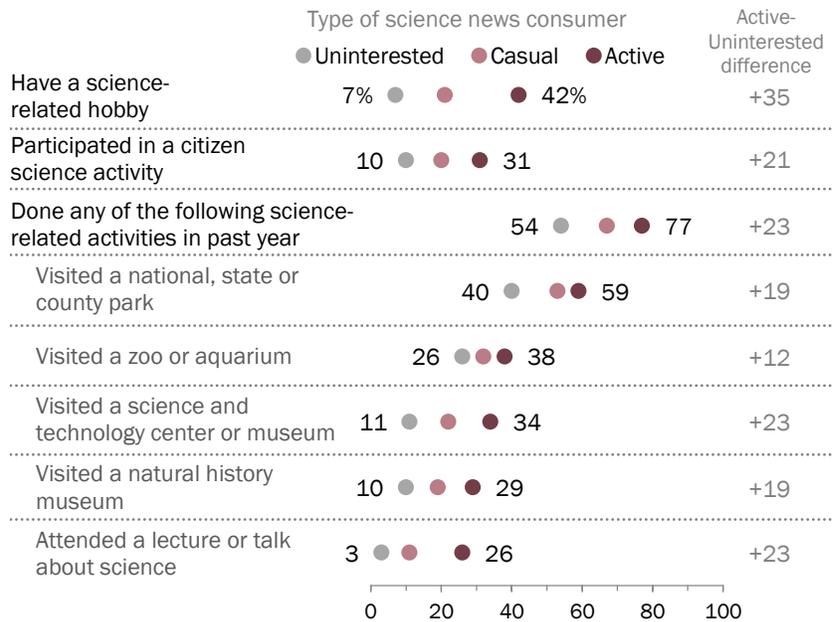
Adults with more education and higher incomes levels are also more likely to have participated in any of these

informal science activities and to have a science-related hobby. For details see [Appendix A](#). This is in keeping with a number of past studies showing a tendency for those with higher education and income levels to visit science-related museums or participate in other informal science learning activities.¹⁹

Visits to science-related museums are frequently associated with activities for children. A 69% majority of parents with children under age 18 have visited a park, museum or gone to a science lecture in the past year but so, too, have 59% of adults with no minor children.

Active science news consumers most likely to have attended science-related activities

% of U.S. adults who say they have done each of the following



Note: Type of science news consumer based on their frequency of science news consumption and whether they tend to look for or come across it. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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¹⁹ See National Science Board. 2014. "Chapter 7. Science and Technology: Public Attitudes and Understanding." "Science and Engineering Indicators 2014."

Younger generations are more likely than their older counterparts to report having a science-related hobby (23% of those ages 18 to 29 vs. 12% of those ages 65 and older) and to have participated in a citizen science activity (23% of those ages 18 to 29 vs. 11% of those ages 65 and older), but there are only modest differences by age in visiting an informal science institution. Further, older adults are more likely than younger adults to have been in a clinical or medical research study and to have given money to support medical or science research, even after controlling for income and other factors.

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We received valuable advice from Timothy Caulfield, Canada Research Chair in health law and policy at the University of Alberta, and from John Besley, associate professor and Ellis N. Brandt Chair in public relations at Michigan State University.

Methodology

The analysis in this report is based on a nationally representative survey conducted from May 30 to June 12, 2017, among a sample of 4,024 adults 18 years of age or older. The margin of error for the full sample is plus or minus 1.6 percentage points.

The survey was conducted by the GfK Group in English and Spanish using KnowledgePanel, its nationally representative online research panel. KnowledgePanel members are recruited through probability sampling methods and include 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). A combination of random-digit dialing (RDD) and address-based sampling (ABS) methodologies have been used to recruit panel members (in 2009 KnowledgePanel switched its sampling methodology for recruiting members from RDD to ABS).

KnowledgePanel continually recruits new panel members throughout the year to offset panel attrition as people leave the panel. All active members of the GfK panel were eligible for inclusion in this study. In all, 6,667 panelists were invited to take part in the survey. All sampled members received an initial email to notify them of the survey and provided a link to the survey questionnaire. Additional follow-up reminders were sent to those who had not responded as needed.

The final sample of 4,024 adults was weighted using an iterative technique that matches gender, age, race, Hispanic origin, education, region, household income, home ownership status and metropolitan area to the parameters of the Census Bureau's March 2016 Current Population

Margins of error

	Sample size	Margin of error in percentage points
U.S. adults	4,024	+/- 1.6
Men	1993	+/- 2.3
Women	2031	+/- 2.3
White	2862	+/- 1.9
Black	392	+/- 5.3
Hispanic	447	+/- 4.9
Ages 18-29	610	+/- 4.2
30-49	1207	+/- 3.0
50-64	1313	+/- 2.9
65+	894	+/- 3.5
<i>Science news consumer</i>		
Active	726	+/- 3.9
Casual	1286	+/- 2.9
Uninterested	1938	+/- 2.4

Note: Whites and blacks include only non-Hispanics; Hispanics are of any race. The margins of error are reported at the 95% level of confidence and are calculated by taking into account the average design effect for each subgroup.

Source: Survey conducted May 30-June 12, 2017.

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Survey (CPS). This weight is multiplied by an initial sampling or base weight that corrects for differences in the probability of selection of various segments of GfK's sample and by a panel weight that adjusts for any biases due to nonresponse and noncoverage at the panel recruitment stage (using all of the parameters described above).

Sampling errors and statistical tests of significance take into account the effect of weighting at each of these stages.

The tables show the unweighted sample sizes and the error attributable to sampling that would be expected at the 95% confidence level.

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.

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Margins of error continued

	Sample size	Margin of error in percentage points
Postgraduate	601	+/- 4.3
College graduate	843	+/- 3.6
Some college	1147	+/- 3.1
High school or less	1433	+/- 2.8
<i>Household income</i>		
\$100,000 +	1381	+/- 2.8
\$50,000-\$99,999	1303	+/- 2.9
\$30,000-\$49,999	604	+/- 4.2
<\$30,000	736	+/- 3.8
<i>Party affiliation by ideology</i>		
Republican/lean Rep	1760	+/- 2.5
Conservative Republican	1133	+/- 3.1
Mod/lib Republican	616	+/- 4.2
Democrat/lean Dem	2055	+/- 2.3
Conserv/mod Democrat	1230	+/- 3.0
Liberal Democrat	807	+/- 3.7

Note: The margins of error are reported at the 95% level of confidence and are calculated by taking into account the average design effect for each subgroup.

Source: Survey conducted May 30-June 12, 2017.

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Appendix A: Detailed tables and regression analysis

Science news interest varies by education

*% of U.S. adults who are very
interested in science news*

	%
U.S. adults	25
Men	30
Women	20
White	25
Black	21
Hispanic	26
Ages 18-29	22
30-49	24
50-64	26
65+	27
Postgraduate	38
College graduate	32
Some college	25
High school or less	17
Republican/lean Rep.	21
Democrat/lean Dem.	28

Note: Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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Women express more interest in health and nutrition news; men have more interest in technology news

% of U.S. adults who are interested in each science news topic

	Health and medicine %	Food and nutrition %	Technology %	Energy and environment %	The mind and brain %	Space and astronomy %	Evolution %
U.S. Adults	70	61	57	50	50	40	26
Men	62	50	69	54	45	50	28
Women	78	71	45	47	54	30	25
White	72	61	57	51	51	44	27
Black	62	64	51	41	46	27	22
Hispanic	69	59	55	53	48	33	26
Ages 18-29	58	51	59	46	50	38	31
30-49	65	61	57	48	50	41	25
50-64	78	64	56	53	48	41	25
65+	84	67	54	56	49	37	26
Postgraduate	81	72	69	67	64	46	36
College graduate	79	67	66	57	58	48	31
Some college	71	60	59	50	52	42	26
High school or less	63	55	47	42	40	32	21
Republican/lean Rep.	70	60	56	43	47	41	19
Democrat/lean Dem.	71	63	58	57	52	39	31

Note: Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Conservative Republicans see more problems stemming from the media and from science researchers

% of U.S. adults in each group who say each of the following is a big problem when it comes to news about scientific research findings ...

	Conservative Republican	Mod/Lib Republican	Mod/Conserv Democrat	Liberal Democrat
The news media				
Too quick to report findings that may not hold up	57	46	35	38
Oversimplify scientific research findings	36	29	25	31
Too quick to report on disagreement about findings	32	29	23	21
Cover too many research findings that are not really important	27	20	16	13
Science research/researchers				
It's hard to distinguish between high and low quality studies	49	41	38	34
Science researchers overstate the implications of their research findings	40	29	22	18
The public				
Doesn't know enough about science to understand findings in the news	47	41	41	50
Jumps to conclusions about how to apply new findings to their lives	50	42	39	43

Note: Republicans and Democrats include independents and other non-partisans who "lean" toward the parties. Respondents who gave other responses or who did not give an answer are not shown.

Source: Survey conducted May 30-June 12, 2017.

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Science entertainment audience includes active and uninterested science news consumers

% of U.S. adults who watch any of three types of shows or movies: criminal investigations, hospitals and medical settings, science fiction

	Watch one or more of these types at least sometimes	Hardly ever/ never watch	No answer
U.S. adults	81%	18%	1%
Men	81	18	1
Women	81	18	1
Ages 18-49	79	20	1
50+	83	17	1
College+	82	18	1
Some college	82	17	*
High school or less	79	19	2
Republican/lean Rep.	81	19	1
Democrat/lean Dem.	82	18	1
Science news consumers			
Active	90	9	1
Casual	82	17	1
Uninterested	78	21	1

Note: Responses combined based on frequency of watching each type of show; no answer includes those who gave no response to any of the three questions.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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More participation in these science and medicine activities among better educated, more affluent and active science news consumers

% of U.S. adults who have ...

	Been to any of 5 informal science venues in past year	Science-related hobby	Donated blood	Helped a child's science project	Donated money for research	Participated in medical clinical study	Participated in a citizen science activity
U.S. adults	62	18	40	36	25	17	16
Men	60	21	41	32	23	16	17
Women	63	15	39	40	27	18	16
White	66	19	47	41	30	19	18
Black	38	14	28	29	19	15	11
Hispanic	59	12	28	28	12	9	12
Ages 18-29	63	23	28	21	12	13	23
30-49	66	20	38	37	21	16	19
50-64	60	15	46	44	29	17	13
65+	56	12	49	41	42	21	11
Postgraduate	81	29	51	46	42	29	30
College graduate	76	27	51	47	36	24	24
Some college	65	19	45	39	27	17	15
High school or less	47	9	29	27	14	9	9
Household income							
\$100,000+	77	23	49	45	36	21	23
\$50,000-\$99,999	64	16	42	38	27	17	14
\$30,000-\$49,999	54	15	35	31	17	12	13
< \$30,000	40	13	27	25	12	11	12
Type of science news consumer							
Active	77	42	49	50	37	28	31
Casual	67	21	43	40	28	18	20
Uninterested	54	7	36	30	20	12	10
Parent of minor-age child							
Yes	69	18	39	45	18	13	20
No	59	17	40	34	27	18	15

Note: Citizen science activity based on those who have done any of three activities. Whites and blacks are non-Hispanics only; Hispanics are of any race. Type of science news consumer based on frequency they get science news and whether they tend to look for it or come across it. Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Statistical models predicting participation in science-related activities

Difference in predicted probabilities for each factor

	Been to any of 5 informal science venues in the past year	Science- related hobby	Donated blood	Helped a child's science project	Donated money for research	Medical, clinical study participant	Citizen science activity
Women	+0.08	NS	NS	+0.11	+0.08	+0.04	NS
Black, non-Hispanic	-0.24	NS	-0.15	-0.06	NS	NS	-0.04
Hispanic	NS	-0.07	-0.14	-0.10	-0.11	-0.06	-0.05
Other	NS	NS	-0.17	NS	-0.10	NS	NS
Reference category: White, non-Hispanic							
Ages 30-49	NS	-0.04	+0.05	+0.08	+0.09	NS	-0.08
50-64	-0.08	-0.09	+0.15	+0.24	+0.13	NS	-0.12
65+	-0.11	-0.13	+0.19	+0.23	+0.26	+0.04	-0.14
Reference category: 18-29							
Postgraduate	+0.21	+0.11	+0.14	+0.08	+0.16	+0.14	+0.13
College graduate	+0.18	+0.11	+0.16	+0.13	+0.15	+0.11	+0.09
Some college	+0.13	+0.07	+0.12	+0.07	+0.09	+0.06	+0.04
Reference category: High school, or less							
Household income							
\$100,000+	+0.28	NS	+0.11	+0.14	+0.16	NS	+0.04
\$50,000-\$99,999	+0.19	NS	+0.09	+0.10	+0.11	NS	NS
\$30,000-\$49,999	+0.12	NS	+0.06	+0.06	+0.04	NS	NS
Reference category: <\$30,000							
Type of science news consumer							
Active	+0.21	+0.32	+0.10	+0.21	+0.15	+0.14	+0.19
Casual	+0.10	+0.12	+0.05	+0.10	+0.06	+0.05	+0.08
Reference category: Uninterested							
Parent of minor-age child							
Yes	+0.08	NS	+0.06	+0.20	-0.05	-0.04	+0.04

Note: Citizen science activity based on those who have done any of three activities. Figures shown are the difference in predicted probabilities with the reference category while other factors are held at their mean using binary logistic regression models. Positive and negative values indicated the direction of effects. NS indicates not statistically significant based on a two-tailed p value < 0.05.

Source: Survey conducted May 30-June 12, 2017.

"Science News and Information Today"

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Survey questionnaire and topline

2017 SCIENCE NEWS & INFORMATION QUESTIONNAIRE May 30-June 12, 2017 N=4,024

QUESTIONS 1 THROUGH 3 HELD FOR FUTURE RELEASE

ASK ALL:

MUSEUM

Which, if any, of the following have you done within the PAST 12 months?

[Select all answers that apply] **[RANDOMIZE ITEMS; item j always last]**

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. Visited a zoo or aquarium May 30-June 12, 2017 [N=4,024]	30	70
b. Visited an art museum or gallery May 30-June 12, 2017 [N=4,024]	24	76
c. Visited a natural history museum May 30-June 12, 2017 [N=4,024]	16	84
d. Visited a science and technology center or museum May 30-June 12, 2017 [N=4,024]	18	82
e. Visited a national, state or county park May 30-June 12, 2017 [N=4,024]	47	53
f. Visited a public library May 30-June 12, 2017 [N=4,024]	43	57
g. Attended an event with live music May 30-June 12, 2017 [N=4,024]	41	59
h. Attended a sporting event May 30-June 12, 2017 [N=4,024]	35	65
i. Attended a lecture or talk about science May 30-June 12, 2017 [N=4,024]	10	90
j. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=4,024]	20	80
NET Any science event May 30-June 12, 2017 [N=4,024]	62	38

ASK ALL:

TOPICINT How interested are you in news about each of the following topics? **[RANDOMIZE]**

	<u>Very interested</u>	<u>Somewhat interested</u>	<u>Not too interested</u>	<u>Not at all interested</u>	<u>No Answer</u>
a. Government and politics news May 30-June 12, 2017 [N=4,024]	30	40	19	11	*
b. News about your local community May 30-June 12, 2017 [N=4,024]	41	45	10	4	*
c. Sports news May 30-June 12, 2017 [N=4,024]	17	30	24	28	*
d. Business and finance news May 30-June 12, 2017 [N=4,024]	18	42	27	13	*
e. Science news May 30-June 12, 2017 [N=4,024]	25	46	20	8	*
f. Entertainment news May 30-June 12, 2017 [N=4,024]	10	37	34	18	*

ASK ALL:

SCIOFTEN Thinking just about science news ... How often do you read, watch or listen to news about science?

May 30-
June 12
2017
N=4,024

10	Nearly every day
26	A few times a week
30	A few times a month
34	Less often
*	No answer

ASK ALL:

TOPICS1 Which statement best describes how you get science news? **[RANDOMIZE]**

May 30-
June 12
2017
N=4,024

49	I get science news on just a couple of topics
48	I get science news on a lot of different topics
3	No answer

ASK ALL:
TOPICS2

Which, if any, of these science-related topics are you interested in?

[Select all answers that apply] [**RANDOMIZE ITEMS; items h and i always last**]

		<u>Selected</u>	<u>Not selected/ No answer</u>
a.	Health and medicine May 30-June 12, 2017 [N=4,024]	70	30
b.	Technology May 30-June 12, 2017 [N=4,024]	57	43
c.	Energy and environment May 30-June 12, 2017 [N=4,024]	50	50
d.	Food and nutrition May 30-June 12, 2017 [N=4,024]	61	39
e.	Space and astronomy May 30-June 12, 2017 [N=4,024]	40	60
f.	Evolution of humans and animals May 30-June 12, 2017 [N=4,024]	26	74
g.	The mind and brain May 30-June 12, 2017 [N=4,024]	50	50
h.	Other May 30-June 12, 2017 [N=4,024]	2	98
i.	None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=4,024]	7	93

COMBINED RESPONSES TOPICS2 AND TOPICMOST [BASED ON TOTAL N=4,024]:

TOPICS2 Which, if any, of these science-related topics are you interested in?

[Select all answers that apply] [RANDOMIZE ITEMS; items h and i always last]

ASK IF INTERESTED IN TWO OR MORE TOPICS IN TOPICS2:

TOPICMOST And, among those, which are you MOST interested in?

	May 30-June 12, 2017			
	NET Interested (TOPICS2)	Most interested (TOPICMOST) /Selected alone (TOPICS2)	Interested (TOPICS2)/Not most interested (TOPICSMOST)	Not selected/ No answer
a. Health and medicine	70	28	43	30
b. Technology	57	17	39	43
c. Energy and environment	50	9	41	50
d. Food and nutrition	61	17	44	39
e. Space and astronomy	40	9	31	60
f. Evolution of humans and animals	26	2	24	74
g. The mind and brain	50	9	40	50
h. Other	2	1	1	98
i. None of these	7	7	N/A	93

ASK ALL:

SOURCE1 Which statement best describes how you get science news? [RANDOMIZE]

May 30-
June 12
2017

N=4,024

39	I get most of my science news from a couple of specific sources
57	I get science news from many different sources
3	No answer

ASK ALL:

SOURCE2 Which statement best describes how you get science news? [RANDOMIZE]

May 30-
June 12
2017

N=4,024

24	I get most of my science news from sources that specialize in science topics
72	I get most of my science news from sources that cover all sorts of general news topics
4	No answer

ASK ALL:

ENJOY How much would you say you enjoy following news about science compared with other kinds of news?

May 30- June 12 <u>2017</u> N=4,024	
8	A lot more than other news
43	More than other news
33	Less than other news
13	A lot less than other news
1	No answer

ASK ALL:

KNOWLEDGE How much would you say you know about science?

May 30- June 12 <u>2017</u> N=4,024	
10	A lot
53	Some
31	Not much
6	Nothing at all
*	No answer

ASK ALL:

SEEK Which statement best describes how you get science news? **[RANDOMIZE]**

May 30- June 12 <u>2017</u> N=4,024	
30	I mostly get science news because I'm looking for it
68	I mostly get science news because I happen to come across it
2	No answer

ASK ALL:
SOURCE3

Which of the following, if any, do you regularly get your science news from?

[Select all answers that apply] **[RANDOMIZE ITEMS; items j and k always last]**

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. News outlets that cover a range of topics May 30-June 12, 2017 [N=4,024]	54	46
b. Documentaries or other science video programs May 30-June 12, 2017 [N=4,024]	45	55
c. Science magazines in print or online May 30-June 12, 2017 [N=4,024]	25	75
d. Online discussion forums about science May 30-June 12, 2017 [N=4,024]	11	89
e. Science podcasts or radio programs May 30-June 12, 2017 [N=4,024]	12	88
f. Family, friends and acquaintances May 30-June 12, 2017 [N=4,024]	33	67
g. Government agencies May 30-June 12, 2017 [N=4,024]	10	90
h. Advocacy organizations May 30-June 12, 2017 [N=4,024]	6	94
i. Science and technology centers or museums May 30-June 12, 2017 [N=4,024]	12	88
j. Other websites and blogs focused on science May 30-June 12, 2017 [N=4,024]	26	74
k. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=4,024]	12	88

ASK ALL:

SOURCEALT

Do you regularly get science news from sources that provide alternative perspectives to conventional science or medical research, or don't you do this?

May 30-
June 12
2017
N=4,024

8	Yes [please specify which source(s)]
90	No
2	No answer

ASK ALL:

SCIWHY

Here are some reasons people follow news about science. Is each a reason you follow news about science, or not? **[RANDOMIZE]**

	<u>Yes, a major reason</u>	<u>Yes, a minor reason</u>	<u>No, not a reason</u>	<u>No Answer/Not applicable</u>
a. I enjoy talking with others about what's happening in science May 30-June 12, 2017 [N=4,024]	15	42	43	1
b. It is related to the things I need to know or do for my job May 30-June 12, 2017 [N=4,024]	11	20	69	1
c. It helps me make decisions about everyday life for me and my family May 30-June 12, 2017 [N=4,024]	18	39	42	1
d. I feel I have a social or civic obligation to stay informed about science May 30-June 12, 2017 [N=4,024]	13	35	51	1
e. I am curious about what's happening in science May 30-June 12, 2017 [N=4,024]	39	42	18	1
g. It is related to my activities, hobbies or interests outside of work May 30-June 12, 2017 [N=4,024]	15	35	49	1
f. It is related to my children's activities, interests, or education Based on total [N=4,024] May 30-June 12, 2017	6	9	9	75
Based on parents of children under 18 (XPARENT=1) [N=929] May 30-June 12, 2017	24	38	37	1

ASK ALL:**WHYNOT**

Here are some reasons people DO NOT follow news about science more often. Is each a reason you don't follow science news more often, or not? **[RANDOMIZE]**

	<u>Yes, a major reason</u>	<u>Yes, a minor reason</u>	<u>No, not a reason</u>	<u>No Answer</u>
a. Science news is boring May 30-June 12, 2017 [N=4,024]	6	20	73	1
b. Science news is hard to understand May 30-June 12, 2017 [N=4,024]	8	30	62	1
c. I often disagree with the news I see about science May 30-June 12, 2017 [N=4,024]	5	18	75	1
d. Science news is less important to keep up with than other topics May 30-June 12, 2017 [N=4,024]	6	23	70	1
e. I'm too busy to keep up with science news more often May 30-June 12, 2017 [N=4,024]	11	35	53	1
f. I already get enough science news May 30-June 12, 2017 [N=4,024]	5	18	76	1
g. The sources I regularly get news from do not cover a lot of science news May 30-June 12, 2017 [N=4,024]	9	34	56	2
h. The science topics I am most interested in are not covered often May 30-June 12, 2017 [N=4,024]	6	27	66	1

ASK ALL:

NEWSJOB Overall, how would you rate the job news media do in covering science?

May 30-
June 12
2017
N=4,024

6	Very good job
52	Somewhat good job
32	Somewhat bad job
9	Very bad job
1	No answer

ASK ALL:NEWSFACTS How often, if ever, do each of the following sources GET THE FACTS RIGHT when it comes to science? [**SHOW IN SAME ORDER AS SOURCE3**]

a. News outlets that cover a range of topics

May 30-
June 12
2017
N=4,024

6	Almost all of the time
23	More than half of the time
28	About half of the time
13	Less than half of the time
7	Hardly ever
22	I don't know enough about this type of source to rate
1	No answer

Based on those
who rated
N=3,146

8
30
36
17
9

b. Documentaries or other science video programs

May 30-
June 12
2017
N=4,024

19	Almost all of the time
32	More than half of the time
16	About half of the time
5	Less than half of the time
4	Hardly ever
23	I don't know enough about this type of source to rate
1	No answer

Based on those
who rated
N=3,110

26
42
21
6
5

NEWSFACTS CONTINUED...

c. Science magazines in print or online

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,878
18	Almost all of the time	26
28	More than half of the time	40
14	About half of the time	20
5	Less than half of the time	7
5	Hardly ever	7
28	I don't know enough about this type of source to rate	
1	No answer	

d. Online discussion forums about science

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,287
3	Almost all of the time	6
13	More than half of the time	23
22	About half of the time	38
12	Less than half of the time	21
7	Hardly ever	12
41	I don't know enough about this type of source to rate	
2	No answer	

e. Science podcasts or radio programs

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,251
8	Almost all of the time	13
21	More than half of the time	37
16	About half of the time	29
6	Less than half of the time	10
6	Hardly ever	10
42	I don't know enough about this type of source to rate	
2	No answer	

NEWSFACTS CONTINUED...

f. Family, friends and acquaintances

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=3,224
3	Almost all of the time	4
14	More than half of the time	17
32	About half of the time	40
21	Less than half of the time	26
10	Hardly ever	13
19	I don't know enough about this type of source to rate	
1	No answer	

g. Government agencies

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,967
8	Almost all of the time	10
21	More than half of the time	29
22	About half of the time	30
12	Less than half of the time	17
9	Hardly ever	13
26	I don't know enough about this type of source to rate	
1	No answer	

h. Advocacy organizations

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,428
5	Almost all of the time	8
17	More than half of the time	29
20	About half of the time	33
10	Less than half of the time	17
8	Hardly ever	13
39	I don't know enough about this type of source to rate	
2	No answer	

NEWSFACTS CONTINUED...

i. Science and technology centers or museums

May 30- June 12 <u>2017</u> N=4,024		Based on those who rated N=2,975
27	Almost all of the time	37
27	More than half of the time	37
10	About half of the time	13
5	Less than half of the time	6
5	Hardly ever	7
26	I don't know enough about this type of source to rate	
1	No answer	

**ASK ALL:
STORIES**

Do you ever read, watch or listen to news stories that report...

[Select all answers that apply] **[RANDOMIZE ITEMS; item h always last]**

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. A new scientific discovery May 30-June 12, 2017 [N=4,024]	56	44
b. Scientific information that helps you make decisions about everyday life for you and your family May 30-June 12, 2017 [N=4,024]	37	63
c. Disagreement among scientific experts May 30-June 12, 2017 [N=4,024]	29	71
d. Scientific research findings that conflict with earlier research findings on the same topic May 30-June 12, 2017 [N=4,024]	41	59
e. Strange or weird scientific research findings May 30-June 12, 2017 [N=4,024]	48	52
f. Scientific research findings that seem completely made up May 30-June 12, 2017 [N=4,024]	18	82
g. Stories about a science researcher's misconduct May 30-June 12, 2017 [N=4,024]	15	85
h. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=4,024]	25	75

ASK IF GETS NEWS THAT HELPS MAKE DECISIONS (STORIES_B=1) [N=1,556]:

DECIS_OE What was the most recent science news story you read, watched or listened to that helped you make a decision about everyday life for you or your family? **[OPEN-END]**

Based on those who “ever see news that helps you make decisions about everyday life for you or your family” N=1,556

May 30-June 12

2017

23	Medicine and health NET
8	<i>Diseases and treatments</i>
5	<i>General medicine and health</i>
3	<i>Effects of medications</i>
2	<i>Vaccinations</i>
2	<i>Effects of vitamins and supplements</i>
1	<i>Bug-borne diseases</i>
1	<i>Exercise/fitness</i>
1	<i>Sleep</i>
*	<i>Stem cell/stem cell research</i>
16	Climate change, energy and environment NET
8	<i>Climate change and global warming</i>
2	<i>Energy</i>
2	<i>General environment</i>
2	<i>Air and water quality/conservation</i>
1	<i>Plants and animals</i>
1	<i>Weather</i>
*	<i>Recycling</i>
16	Food and nutrition NET
7	<i>Effects of food on health</i>
4	<i>"Nutrition"/"diet"</i>
3	<i>General food</i>
2	<i>GMOs</i>
1	<i>Chemicals/additives in food</i>
3	Space and astronomy
3	Technology NET
2	<i>Advances in technology (nanotech, AI, etc.)</i>
1	<i>General technology</i>
1	Social behaviors NET
1	<i>Parenting and pregnancy</i>
1	<i>General social behaviors</i>
6	Other responses
32	Don't know/Not sure

ASK IF GETS NEWS ABOUT DISAGREEMENTS (STORIES_C=1) [N=1,309]:

DISAG_OE What was the most recent news story you read, watched or listened to about a disagreement among scientific experts? **[OPEN-END]**

Based on those who "ever see news about disagreements among scientific experts" N=1,309

May 30-June 12

2017

34	Climate change, energy and environment NET
32	<i>Climate change and global warming</i>
1	<i>Energy</i>
1	<i>General energy and environment</i>
*	<i>Earth is flat</i>
8	Medicine and health NET
2	<i>Vaccinations</i>
2	<i>General medicine and health</i>
2	<i>Disease causes and treatments</i>
1	<i>Marijuana</i>
*	<i>Medical drug</i>
*	<i>Mammograms</i>
*	<i>Vitamins and supplements</i>
7	Space and astronomy NET
3	<i>Planets (new planets, Pluto, etc.)</i>
3	<i>General space and astronomy</i>
1	<i>Extraterrestrials/UFOs</i>
6	Food and nutrition NET
3	<i>What food to eat/avoid</i>
2	<i>General food and nutrition</i>
1	<i>GMOs</i>
*	<i>Gluten</i>
5	Life sciences NET
3	<i>Evolution, creationism/human origins</i>
1	<i>Dinosaurs and prehistoric animals</i>
1	<i>General life sciences</i>
*	Supernatural
7	Other responses
22	Don't know/Not sure

ASK IF GET NEWS ABOUT MADE UP SCIENCE (STORIES_F=1) [N=747]:

FAKE_OE What was the most recent scientific research finding you saw that seemed completely made up? **[OPEN-END]**

Based on those who “ever see scientific research findings that seem completely made up” N=747

May 30-June 12

2017

16	Climate change, energy and environment NET
14	<i>Climate change and global warming</i>
1	<i>General environment</i>
1	<i>Energy</i>
*	<i>Weather</i>
9	Space and extraterrestrials NET
4	<i>Extraterrestrials/UFOs</i>
3	<i>General air and space</i>
2	<i>New planets/universes</i>
5	Life sciences NET
2	<i>Animals</i>
1	<i>Evolution, creationism</i>
1	<i>General life sciences</i>
1	<i>Dinosaurs</i>
5	Food and nutrition NET
4	<i>Food</i>
1	<i>Remedies (vitamins, supplements, DIY health)</i>
4	Medicine and health NET
3	<i>General medicine and health</i>
2	<i>Diseases and treatments</i>
2	<i>Vaccinations</i>
1	<i>Gender fluidity and gender</i>
4	Supernatural and mythical creatures
1	Technology NET
1	<i>Military technology</i>
1	<i>General technology</i>
1	Political
9	Other responses
43	Don't know/Not sure

ASK ALL:

SNSUSE Do you ever use social media (such as Facebook, Twitter, or Snapchat)?

May 30-

June 12

2017

N=4,024

70	Yes
30	No
*	No answer

ASK IF USES SOCIAL MEDIA (SNSUSE=1) [N=2,755]:

SNSFREQ And do you use social media...

Based on those who use social media

N=2,755

54	Several times a day
23	About once a day
15	A few times a week
5	Every few weeks
4	Less often
*	No answer

ASK IF USES SOCIAL MEDIA (SNSUSE=1) [N=2,755]:

FOLLOW On social media, do you follow any organizations, people or pages that are focused on science?

Based on those who use social media

N=2,755

26	Yes, at least one
73	No, none
*	No answer

ASK IF USES SOCIAL MEDIA (SNSUSE=1) [N=2,755]:

FOLLOWANTI On social media, do you follow any organizations, people or pages that provide alternative perspectives to conventional science or medical research?

Based on those who use social media

N=2,755

18	Yes, at least one
81	No, none
1	No answer

ASK IF USES SOCIAL MEDIA (SNSUSE=1) [N=2,755]:

SNSSCI Of the posts you see on social media, how many are about science?

Based on those who use social media

N=2,755

2	A lot
23	Some
53	Not many
21	None
*	No answer

ASK IF EVER SEES SCIENCE POSTS ON SOCIAL MEDIA (SNSSCI=1, 2 or 3) [N=2,186]:

SNSCLICK When you see science news posts on social media, how often do you click on a link to a news story?

Based on those who "ever see science posts on social media"

N=2,186

13	Often
55	Sometimes
26	Hardly ever
5	Never
1	No answer

Based on those who use social media

N=2,755

79	See science posts on social media
10	Often
43	Sometimes
21	Hardly ever
4	Never
1	No answer
21	Do not see science posts on social media
*	No answer

ASK IF EVER SEES SCIENCE POSTS ON SOCIAL MEDIA (SNSSCI=1, 2 or 3) [N=2,186]:

SNSSCIMP Which of the following statements best describes you?

Based on those who "ever see science posts on social media"

N=2,186

7	Social media are the most important way I get science news
35	Social media are an important way I get science news, but not the most important
57	Social media are not a very important way I get science news
1	No answer

Based on those who use social media

N=2,755

79	See science posts on social media
6	Social media are the most important way I get science news
28	Social media are an important way I get science news, but not the most important
45	Social media are not a very important way I get science news
1	No answer
21	Do not see science posts on social media
*	No answer

ASK IF EVER SEES SCIENCE POSTS ON SOCIAL MEDIA (SNSSCI=1, 2 or 3) [N=2,186]:

SNSPOST Thinking about social media posts you see about science, do you ever see posts about ...

[Select all answers that apply] **[RANDOMIZE ITEMS; item j always last]****Based on those who “ever see science posts on social media”**

		<u>Selected</u>	<u>Not selected/ No answer</u>
a.	A new scientific discovery May 30-June 12, 2017 [N=2,186]	47	53
b.	Scientific information that helps you make decisions about everyday life for you and your family May 30-June 12, 2017 [N=2,186]	27	73
c.	Disagreement among scientific experts May 30-June 12, 2017 [N=2,186]	20	80
d.	Scientific research findings that conflict with earlier research findings on the same topic May 30-June 12, 2017 [N=2,186]	30	70
e.	Strange or weird scientific research findings May 30-June 12, 2017 [N=2,186]	50	50
f.	Scientific research findings that seem completely made up May 30-June 12, 2017 [N=2,186]	30	70
g.	Stories about a science researcher’s misconduct May 30-June 12, 2017 [N=2,186]	9	91
h.	Stories that you disagree with May 30-June 12, 2017 [N=2,186]	33	67
i.	Celebrities providing health or medical advice May 30-June 12, 2017 [N=2,186]	34	66
j.	None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=2,186]	18	82

ASK IF SEES MADE-UP SCIENCE NEWS ON SOCIAL MEDIA (SNSPOST_f=1) [N=684]:

SNSCHECK1 Have you ever done any of the following in response to a social media post about scientific research findings that seemed completely made up?

[Select all answers that apply] **[RANDOMIZE ITEMS; item f always last]**

Based on those who “ever see scientific research findings that seem completely made up on social media”

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. Commented on the story May 30-June 12, 2017 [N=684]	27	73
b. Searched for more information May 30-June 12, 2017 [N=684]	49	51
c. Shared the story in order to show it’s wrong May 30-June 12, 2017 [N=684]	14	86
d. Ignored or hid the story May 30-June 12, 2017 [N=684]	40	60
e. Unfollowed or blocked the person or organization the story came from May 30-June 12, 2017 [N=684]	22	78
f. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=684]	22	78

ASK IF SEES SCIENCE NEWS THEY DISAGREE WITH ON SOCIAL MEDIA (SNSPOST_h=1) [N=769]:

SNSCHECK2 Have you ever done any of the following in response to a social media post about science news that you disagreed with?

[Select all answers that apply] **[SHOW IN SAME ORDER AS SNSCHECK1]**

Based on those who “ever see science stories they disagree with on social media”

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. Commented on the story May 30-June 12, 2017 [N=769]	28	72
b. Searched for more information May 30-June 12, 2017 [N=769]	50	50
c. Shared the story in order to show it’s wrong May 30-June 12, 2017 [N=769]	11	89
d. Ignored or hid the story May 30-June 12, 2017 [N=769]	33	67
e. Unfollowed or blocked the person or organization the story came from May 30-June 12, 2017 [N=769]	15	85
f. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=769]	24	76

ASK IF EVER SEES SCIENCE POSTS ON SOCIAL MEDIA (SNSSCI=1, 2 or 3) [N=2,186]:

SNSNEW How often would you say the science news you see on social media are stories that you wouldn't have seen elsewhere?

Based on those who "ever see science posts on social media"

N=2,186

10	Often
46	Sometimes
33	Hardly ever
11	Never
1	No answer

Based on those who use social media

N=2,755

79	See science posts on social media
8	Often
36	Sometimes
26	Hardly ever
8	Never
1	No answer
21	Do not see science posts on social media
*	No answer

ASK IF EVER SEES SCIENCE POSTS ON SOCIAL MEDIA (SNSSCI=1, 2 or 3) [N=2,186]:

SNSTRUST Thinking about all of the posts you see on social media about science, would you say you... **[RANDOMIZE]**

Based on those who "ever see science posts on social media"

N=2,186

34	Mostly trust them
65	Mostly distrust them
1	No answer

Based on those who use social media

N=2,755

79	See science posts on social media
26	Mostly trust them
52	Mostly distrust them
1	No answer
21	Do not see science posts on social media
*	No answer

ASK ALL:

PROBSET

Thinking in general about science news today...

Do you think that each of the following is a big problem, a small problem or not a problem when it comes to news about scientific research findings? **[RANDOMIZE]**

	<u>A big problem</u>	<u>A small problem</u>	<u>Not a problem</u>	<u>No answer</u>
a. The news media are too quick to report research findings that may not hold up May 30-June 12, 2017 [N=4,024]	43	37	17	2
b. The news media cover too many research findings that are not really important May 30-June 12, 2017 [N=4,024]	20	43	35	2
c. There are so many research studies out there it's hard to distinguish between high and low quality studies May 30-June 12, 2017 [N=4,024]	40	39	18	2
d. The public jumps to conclusions about how to apply new research findings to their lives May 30-June 12, 2017 [N=4,024]	42	38	17	2
e. The public doesn't know enough about science to really understand research findings covered in the news May 30-June 12, 2017 [N=4,024]	44	38	16	2
f. The news media oversimplify scientific research findings May 30-June 12, 2017 [N=4,024]	30	42	26	2
g. Science researchers overstate the implications of their research findings May 30-June 12, 2017 [N=4,024]	27	47	24	2
h. The news media are too quick to report on disagreement about science research findings May 30-June 12, 2017 [N=4,024]	26	42	29	2

ASK ALL:

BLAME Which of these do you think is the BIGGER problem when it comes to news about scientific research findings? **[RANDOMIZE]**

May 30-
June 12
2017
N=4,024

73	The way news reporters cover scientific research findings
24	The way science researchers publish or share their new research findings
3	No answer

ASK ALL:

DISCUSS Thinking about the people you talk with, whether in person, over the phone, or online... How often do you discuss science news with others?

May 30-
June 12
2017
N=4,024

3	Nearly every day
14	A few times a week
27	A few times a month
55	Less often
1	No answer

ASK IF DISCUSSES SCIENCE AT LEAST A FEW TIMES A MONTH (DISCUSS=1, 2 or 3)
[N=1,814]:

LEAD When you talk to people about science news, do you tend to... **[RANDOMIZE]**

Based on those who "discuss science news with others at least a few times a month"

N=1,814

63	Listen to the conversation more than lead
36	Lead the conversation more than listen
1	No answer

ASK IF DISCUSSES SCIENCE AT LEAST A FEW TIMES A MONTH (DISCUSS=1, 2 or 3)
[N=1,814]:

TURN Do you typically turn to others for science news, or do people typically turn to you?

Based on those who "discuss science news with others at least a few times a month"

N=1,814

54	I turn to others
44	People turn to me
2	No answer

RANDOMIZE ENTCRIM1-ENTCRIME4; ENTHOSP1-ENTHOSP4; ENTSCIFI1-ENTSCIFI4:**ASK ALL:**

ENTCRIM1 How often do you watch entertainment programs or movies that are focused on CRIMINAL INVESTIGATIONS?

May 30-

June 12

2017

N=4,024

26	Often
37	Sometimes
21	Hardly ever
15	Never
1	No answer

ASK ALL:

ENTCRIM2 Which comes closer to your view about CRIMINAL INVESTIGATION shows or movies, even if neither is exactly right? **[RANDOMIZE]**

May 30-

June 12

2017

N=4,024

35	They generally portray science, technology and medicine in a realistic way
62	They focus on entertainment more than getting the science, technology and medicine in the story right
3	No answer

ASK ALL:

ENTCRIM3 Overall, do you think watching CRIMINAL INVESTIGATION shows or movies...

May 30-

June 12

2017

N=4,024

30	Helps your understanding of science, technology and medicine
11	Hurts your understanding of science, technology and medicine
57	Makes no difference in your understanding of science, technology and medicine
2	No answer

ASK ALL:

ENTCRIM4 Overall, do you think CRIMINAL INVESTIGATION shows or movies...

May 30-
June 12
2017
N=4,024

47	Give a favorable impression of working in science, technology and medicine
11	Give an UNfavorable impression of working in science, technology and medicine
39	Give a neutral impression of working in science, technology and medicine
2	No answer

ASK ALL:

ENTHOSP1 How often do you watch entertainment programs or movies that are focused on HOSPITALS AND MEDICAL SETTINGS?

May 30-
June 12
2017
N=4,024

11	Often
31	Sometimes
34	Hardly ever
23	Never
1	No answer

ASK ALL:ENTHOSP2 Which comes closer to your view about shows or movies focused on HOSPITALS AND MEDICAL SETTINGS, even if neither is exactly right? [**SHOW IN SAME ORDER AS ENTCRIM2**]

May 30-
June 12
2017
N=4,024

32	They generally portray science, technology and medicine in a realistic way
66	They focus on entertainment more than getting the science, technology and medicine in the story right
3	No answer

ASK ALL:

ENTHOSP3 Overall, do you think watching shows or movies focused on HOSPITALS AND MEDICAL SETTINGS...

May 30-
June 12
2017

N=4,024

23	Helps your understanding of science, technology and medicine
12	Hurts your understanding of science, technology and medicine
62	Makes no difference in your understanding of science, technology and medicine
2	No answer

ASK ALL:

ENTHOSP4 Overall, do you think shows or movies focused on HOSPITALS AND MEDICAL SETTINGS...

May 30-
June 12
2017

N=4,024

37	Give a favorable impression of working in science, technology and medicine
14	Give an UNfavorable impression of working in science, technology and medicine
46	Give a neutral impression of working in science, technology and medicine
2	No answer

ASK ALL:

ENTSCIF11 How often do you watch entertainment programs or movies that are SCIENCE FICTION?

May 30-
June 12
2017

N=4,024

15	Often
34	Sometimes
27	Hardly ever
23	Never
1	No answer

ASK ALL:

ENTSCIFI2 Which comes closer to your view about SCIENCE FICTION shows or movies, even if neither is exactly right? **[SHOW IN SAME ORDER AS ENTCRIM2]**

May 30-
June 12
2017
N=4,024

18	They generally portray science, technology and medicine in a realistic way
79	They focus on entertainment more than getting the science, technology and medicine in the story right
3	No answer

ASK ALL:

ENTSCIFI3 Overall, do you think watching SCIENCE FICTION shows or movies...

May 30-
June 12
2017
N=4,024

13	Helps your understanding of science, technology and medicine
13	Hurts your understanding of science, technology and medicine
72	Makes no difference in your understanding of science, technology and medicine
2	No answer

ASK ALL:

ENTSCIFI4 Overall, do you think SCIENCE FICTION shows or movies...

May 30-
June 12
2017
N=4,024

30	Give a favorable impression of the future for science, technology and medicine
20	Give an UNfavorable impression of the future for science, technology and medicine
47	Give a neutral impression of the future of science, technology and medicine
3	No answer

ASK ALL:

HOBBY Do you have any science-related hobbies, interests, or activities outside of work?

May 30-
June 12
2017
N=4,024

18	Yes
82	No
1	No answer

ASK IF HAS A HOBBY (HOBBY=1) [N=742]:HOBBY2 What kind of hobby, interest or activity is that? [**OPEN-END**]

Among all U.S. adults N=4,024		Among those who have a hobby N=742
5	Environment and nature NET	28
1	<i>Outside activities and sports</i>	6
1	<i>Gardening and farming</i>	6
1	<i>Botany/plants</i>	3
1	<i>General environment and nature</i>	3
*	<i>Animal-related</i>	3
*	<i>Conservation</i>	3
*	<i>Geology/Archaeology</i>	2
*	<i>Birdwatching/Ornithology</i>	1
*	<i>Weather</i>	1
3	Air, space and astronomy NET	17
2	<i>Astronomy</i>	9
1	<i>General air and space</i>	3
*	<i>Rockets and rocketry</i>	1
*	<i>Aviation</i>	*
3	Technology NET	15
1	<i>Computers and computer programming</i>	5
1	<i>General technology</i>	4
*	<i>Model building</i>	2
*	<i>Electronics and machines</i>	2
*	<i>Robotics</i>	1
*	<i>Cars</i>	1
1	Health and wellness NET	8
1	<i>General health and wellness</i>	4
1	<i>Exercise and nutrition</i>	4
1	Experiments and research in specific topics NET	8
1	<i>General research and experiments</i>	3
1	<i>Interest in specific science topics</i>	3
*	<i>Research and experiments with kids</i>	2
1	Science learning activities NET	7
1	<i>Reading</i>	4
*	<i>Museums</i>	1
*	<i>Educational science programs</i>	1
*	Food and home improvement NET	2
*	<i>Food science</i>	2
*	<i>Home improvement</i>	*
2	Other responses	11
1	Don't know/Not sure	8

ASK ALL:

LIST1

Which, if any, of the following have you ever done? (Do not count any activities that you did for your job)

[Select all answers that apply] **[RANDOMIZE ITEMS; item h always last]**

	<u>Selected</u>	<u>Not selected/ No answer</u>
a. Participated in a medical or clinical research study May 30-June 12, 2017 [N=4,024]	17	83
b. Made observations or collected data samples as part of a science research project (such as observations about bird, animal and plant life, or weather, air and water quality) May 30-June 12, 2017 [N=4,024]	14	86
c. Contributed to a science-related online crowdsourcing activity (such as classifying stars and galaxies or identifying animals) May 30-June 12, 2017 [N=4,024]	3	97
d. Helped a child with a science project whether for school or for an outside-school activity May 30-June 12, 2017 [N=4,024]	36	64
e. Participated in a maker movement or hack-a-thon event to develop new technologies, devices or software May 30-June 12, 2017 [N=4,024]	2	98
f. Donated blood May 30-June 12, 2017 [N=4,024]	40	60
g. Donated money to support medical or science research May 30-June 12, 2017 [N=4,024]	25	75
h. None of these [EXCLUSIVE PUNCH] May 30-June 12, 2017 [N=4,024]	33	67

ASK ALL:

PARTY In politics today, do you consider yourself a...?

May 30-

June 12

2017

N=4,024

26	Republican
36	Democrat
30	Independent
6	Something else, please specify
2	No answer

ASK IF (PARTY=3,4,-1)[N=1,494]:

PARTYLN As of today, do you lean more to...

Based on those who said Independent, something else, or refused on PARTY

N=1,494

38	The Republican Party
48	The Democratic Party
15	No answer

PARTY/PARTY LN COMBINED

PARTY In politics today, do you consider yourself a...?

PARTYLN As of today, do you lean more to...

May 30-

June 12

2017

N=4,204

26	Republican
36	Democrat
30	Independent
6	Something else, please specify
2	No answer

40	Republican/Lean Republican
54	Democrat/Lean Democrat
6	Refused to lean

ASK ALL:

IDEO In general, would you describe your political views as...

May 30-

June 12

2017

N=4,024

7	Very conservative
26	Conservative
41	Moderate
16	Liberal
7	Very liberal
3	No answer