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Public Interest in Science and Health Linked to Gender, Age and Personality

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Public Interest in Science and Health Linked to Gender, Age and Personality

Those who try to measure public understanding about science and technology often link science and technology with the health and medical domain. Yet, the reality is that different people find those distinct parts of science interesting.

Overall, a new analysis by Pew Research Center finds 37% of online adults say 'health and medicine' is among the topics they find most interesting,¹ while 32% identify 'science and technology' in their top three. But the people who find each topic area to be particularly interesting are, by and large, different publics. Just 11% of online adults say *both* 'science and technology' and 'health and medicine' are of particular interest.

Women are especially likely to express interest in health and medical topics, while men are relatively more inclined to express interest in science and technology. About half of online women (52%) say health and medicine is among the top three topics of interest to them, compared with 22% among men. Men are about twice as likely as women to say science and technology is among the top three topics of interest to them (43% of men compared with 22% of women).

There are also some divides by age when it comes to interest in these topics. Younger adults (ages 18 to 29) are more inclined than older adults (ages 50 to 64) to cite science and technology as a topic of particular interest, while the reverse pattern occurs when it comes to interest in health and medicine.

Beyond demographic differences, personality differences underlie people's interest in these topics. This survey used measures of the "Big Five" personality dimensions that are commonly studied in psychology. They are 1) openness to experience; 2) conscientiousness; 3) agreeableness; 4) emotional stability; and 5) extroversion. One notable finding tied to personality is that adults with a tendency to be open to new experiences, regardless of other characteristics, tend to express more interest in science and technology topics. Two-thirds of online adults (66%) who score high on openness to experience say they are interested in science and technology topics, including 39% who rank science and technology among the topics of most interest to them. By contrast, 23% of those lower on openness to experience identify science and technology topics as being of particular interest while 52% say these topics are not of interest.

¹ Online adults includes 89% of the general adult population. The initial questions identifying topics of interest were asked of the general population while the follow-up questions identifying the top topics were asked only of online adults.

There are more modest differences in interest across other Big Five traits. Introverts express more interest in science and technology topics than do extroverts. For example, 61% of those lower on a two-item extroversion index say they are interested in science and technology topics, compared with 52% among those higher on the extroversion scale. And those lower on a three-item index of conscientiousness tend to express more interest in science and technology topics (with 34% saying these topics are of most interest, compared with 26% among those high in conscientiousness).

These findings come from Pew Research Center's American Trends Panel, a nationally representative panel of randomly selected U.S. adults. The data in this report were collected at a few different time points. The survey asking about interest in science and technology and health and medicine topics was conducted March 19-April 29, 2014, with 3,308 adults; some of the analysis relies on the 2,901 web respondents from this survey. Analysis of those interested in these topics uses measures collected on subsequent surveys (April 29-May 27, 2014, for personality traits and Aug. 11-Sept. 3, 2014, for science knowledge) and is based on the 1,815 respondents who completed several panel surveys (waves 1-9).

There are connections between public interest and public knowledge about science

These findings have meaning in the broad world of public policy and modern life because interest in science and knowledge about science are seen as important indicators of public engagement, especially by the scientific community.

A <u>Pew Research Center survey</u> of U.S.-based members of the American Association for the Advancement of Science (AAAS) suggested broad concerns among the scientific community about the general public's knowledge of and interest in science topics. Fully 84% of AAAS members surveyed said the public's limited science knowledge was a major problem for science. Threequarters of AAAS members said too little K-12 science, technology, engineering and mathematics education (STEM) was a major reason for the public's limited science knowledge. Some 57% said lack of public interest in science news is a major reason for the public's limited knowledge. Fewer, by comparison, considered limited media interest (43%) or too few scientists communicating findings (40%) to be a major reason for the public's limited knowledge about science.

Pew Research Center analysis of the American Trends Panel finds that public knowledge and interest in science topics are linked. Internet users with a particular interest in science and technology topics are also more likely to correctly answer questions on a <u>science knowledge quiz</u> asked several months later (mean score of 9.7 out of 12 items, compared with 7.2 among those not interested in these topics). Of course, interest in science and technology topics may help drive

more knowledge and more knowledge on science and technology topics may help spur interest levels. It's not possible to parse out the causal mechanisms behind this association between interest in science and higher levels of knowledge.

The relatively small news hole for science coverage does not necessarily match the public's interest

Science intersects with many aspects of life, from innovations and inventions to policy debates and even mundane everyday activities. Yet, previous analysis of media coverage by Pew Research Center² between 2007 and 2012 found just 2% of the annual news coverage in traditional media outlets focused on science and technology, while coverage related to health and medicine averages less than 10% annually. And with the <u>changing media landscape</u>, there are a dwindling number of science journalists to cover new scientific developments for traditional news organizations.³

The Pew Research Center survey findings suggest a disjuncture between traditional media attention to these topics and public interest. Majorities of online adults express a broad interest in science and technology (58%) and health and medicine (66%) topics; roughly a third or more of online adults rank science and technology (32%) or health and medicine (37%) as a topic of particular interest.

² See Science and Engineering Indicators 2014, Chapter 7, table 7-2. Also see Pew Research Center, interactive "State of the News Media 2012."

³ See Dudo, A., S. Dunwoody and D. A. Scheufele. 2011. The emergence of nano news: Tracking thematic trends and changes in U.S. newspaper coverage of nanotechnology. Journalism & Mass Communication Quarterly, 88, 55-75. For more on science news consumption in the contemporary media landscape see Su, L.Y., H. Akin, D. Brossard, D.A. Scheufele and M.A. Xenos. 2015. Science News Consumption Patterns and Their Implications for Public Understanding of Science. Journalism & Mass Communication Quarterly, 92(3), 597-616.

1. Public interest in science, health and other topics

Most Americans express a broad interest in health and medicine, as well as in science and technology along with other topics. Seven-inten adults (70%) say they are interested in health and medicine, more than any other of the nine topics asked about in the survey. Large shares also say they are interested in local events in their community (61%), science and technology (59%) as well as government and politics (58%). About half of adults (53%) say religion and spirituality topics interest them. Slightly fewer say entertainment and celebrities (46%), sports (44%), business and finance (43%), or art and theater (41%) are topics that interest them.

The share of web users who express interest in each of these topics is statistically similar to the share of the entire population who report these interests.⁴

Most Americans espouse interest in health, local events, science and politics

% of adults saying they are interested in each topic

	U.S. adults	Web users
Health and medicine	70	66
Events in your community	61	57
Science and technology	59	58
Government and politics	58	57
Religion and spirituality	53	48
Entertainment and celebrities	46	44
Sports	44	41
Business and finance	43	40
Art and theater	41	40

Source: American Trends Panel (wave 1) conducted March 19-April 29, 2014. Sample size = 3,308. Q1a-i/Q2a-i.

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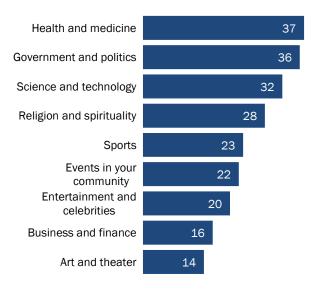
⁴ As shown in a prior Pew Research report, there were few demographic differences between the 88% of respondents who completed this wave of the American Trends Panel on the web (that is, online or "web respondents") and the total sample of U.S. adults. Since Americans ages 65 and older are less likely to be on the Internet, this age group is not presented in the analysis of the web sample.

Web respondents on the American Trends Panel (but not those completing the survey by mail) were also asked to specify up to three topics among the set of nine they found "most interesting." Online adults were especially likely to cite health and medicine, government and politics, and science and technology as topics of particular interest.

Some 37% of online adults say health and medicine is one of the topics they find most interesting, and 32% say science and technology is among the most interesting. A similar share (36%) says they are most interested in government and politics. Fewer adults, by comparison, cite a particular interest in other topics including: religion (28%), sports (23%), local events (22%), business and finance topics (16%), and art and theater (14%).

Health, science and political topics draw public interest

% of web users saying they are most interested in each topic



Note: Based on online adults

Source: American Trends Panel (wave 1) conducted March 19-April 29, 2014. Sample size = 2,901. Q2a-i.

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Some 37% of Americans enjoy keeping up with science news

In general, 37% of Americans say they enjoy keeping up with science news "a lot," according to a separate <u>Pew</u> <u>Research survey conducted by telephone Aug. 15-25, 2014</u>. A figure that is roughly the same as found in a 2009 Pew Research Center survey (35%).

There are wide differences in enjoyment of following science news by educational level. Fully 58% of those with a postgraduate degree and 46% of those with a college degree say they enjoy keeping up with science news a lot. By contrast, 26% of those with a high school degree or less say the same.

Men are more likely than women to say they enjoy keeping up with science news a lot; 43% of men say this, compared with 32% of women.

There are also differences in enjoyment of science news by party affiliation with 43% of Democrats and independents who lean Democratic saying they enjoy following science news a lot, compared with 33% of Republicans and independents who lean toward the Republican Party.

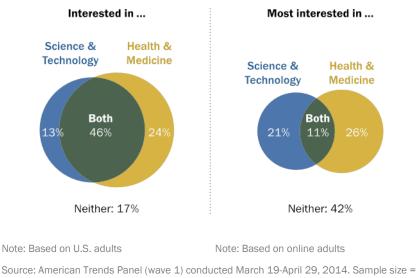


There are two publics with a particular interest in either science and technology or health and medicine

A large share of adults who express some interest in science and technology also express some interest in health and medicine; 46% of adults say both of these topics interest them. But when it comes to the question of the top three topics of interest, only 11% of online adults say both science and technology and health and medicine are among their top three interests. Thus, there are two, mostly non-overlapping, publics who report a particular interest in either science and technology or health and medicine.

Overlapping interests in science and technology and health and medicine

% saying they are interested/most interested in each topic



3,308 or 2901 (based off online adults only). Q1f,g/Q2f,g.

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The health- and medicine-interested public is comprised of more women, the science- and technology-interested public is comprised of more men

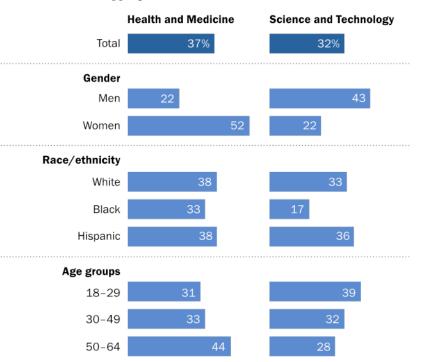
Women are especially likely to express a strong interest in health and medical topics, while men are relatively more inclined to express an interest in science and technology. Women are more than twice as likely as men to say health and medicine is one of the three topics they are most interested in (52% do so, compared with 22% of men). Men are about twice as likely as women to say science and technology is in their top three (43% vs. 22%).

There also tends to be an age divide in interests. Older adults are more likely than younger adults to say health and medicine topics are of particular interest. And the reverse pattern tends to hold when it comes to science and technology.

Some 44% of adults ages 50 to 64 say they are most

Women especially interested in health and medicine; more men interested in science and technology

% of online adults saying they are most interested in health and medicine /science and technology topics



Note: Based on online adults. Whites and blacks include only non-Hispanics; Hispanics are of any race. Adults ages 65 and older are less likely to be on the internet, this age group is not presented in the analysis of online adults.

Source: American Trends Panel (wave 1) conducted March 19-April 29, 2014. Sample size = 2,901. Q2f,g.

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interested in health and medical topics, while 31% of those ages 18 to 29 and 33% of those ages 30 to 49 say the same.⁵ By contrast, some 39% of younger adults (ages 18 to 29) are particularly interested in science and technology topics, compared with 28% among those ages 50 to 64.⁶

 ⁵ Since Americans ages 65 and older are less likely to be on the internet, this age group is not presented in the analysis of the web sample.
⁶ A previous Pew Research report also found younger adults (ages 18 to 29) more likely than their older counterparts to say supporting scientific research should be a top priority for Congress and President Obama in 2015. See Pew Research report "Public's Policy Priorities Reflect Changing Conditions at Home and Abroad," Jan. 2015.

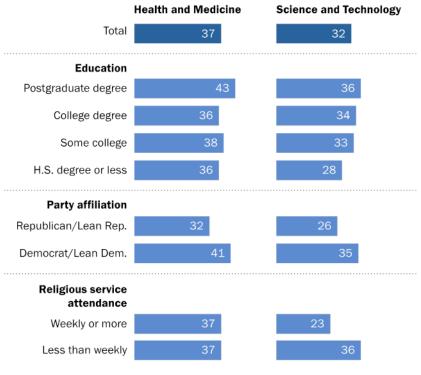
Whites, blacks and Hispanics express roughly similar levels of interest in health and medicine. However, blacks are less likely than either whites or Hispanics to say science and technology is of particular interest (17% among blacks, compared with 33% among whites and 36% among Hispanics).

There are relatively modest differences in interest in both topics by education. Some 43% of postgraduate degree holders say they are especially interested in health and medicine, while fewer of those with a college degree (36%) or those with a high school degree or less (36%) say the same. But when it comes to science and technology, those with some college experience or more education are about equally likely to say they find science and technology to be of strong interest. Those with a high school degree or less are less inclined to say science and technology is of particular interest.

Partisan differences occur when it comes to interest in both topics. Democrats and independents who lean to the Democratic Party are more

Democrats express more interest in science and technology, health and medicine

% of online adults saying they are most interested in health and medicine/science and technology topics



Note: Based on online adults

Source: American Trends Panel (wave 1) conducted March 19-April 29, 2014. Sample size = 2,901. Q2f,g.

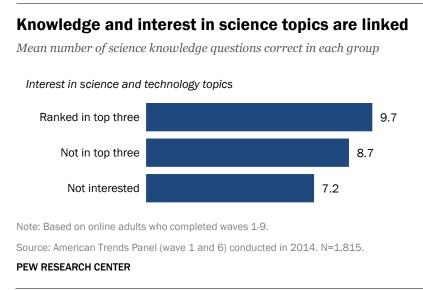
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likely than Republicans and those who lean to Republican to say they are most interested in health and medicine (41% vs. 32%). Similarly, more Democrats and Democratic-leaners (35%) than Republicans and Republican-leaners (26%) say science and technology topics are of particular interest to them. Religious groups hold roughly the same levels of interest in health and medical topics but vary when it comes to science and technology. Half of the religiously unaffiliated (50%) express a particular interest in science and technology topics, compared with 24% among Protestants and 26% among Catholics. Similarly, those who attend religious services at least weekly are less likely than others to rank science and technology topics of particular interest to them. There are no differences across religious traditions when it comes to interest in health and medicine topics, however. And those who attend religious services regularly are equally likely as less frequent attenders to express a particular interest in health and medical topics (37% do so among each group.)

Those who are more interested are also more knowledgeable about science topics

Those in the scientific community who have raised concerns about public interest in science topics also often link public interest with knowledge and understanding of science. For example, in <u>Pew Research</u> <u>Center's survey of U.S.-based</u> <u>members of the American</u> <u>Association for the</u> <u>Advancement of Science</u> (AAAS) found broad concerns

about the public's knowledge of science, and some 57% considered a lack of public



interest in science news to be a major reason behind the public's limited knowledge about science.

Indeed, the new Pew Research Center analysis finds a strong association between public knowledge of science topics and reported interest levels. The American Trends Panel survey found that respondents reporting a particular interest in science and technology topics were also more likely to answer questions on a <u>science knowledge quiz</u> asked several months later correctly (mean 9.7 out of 12 correct questions, compared with 7.2 among those not interested in these topics).⁷ Of course, interest in science and technology topics may be helping drive more knowledge and more

⁷ One might also expect a similar relationship between interest in health and medicine topics and knowledge about life sciences or biomedical science topics. Those kinds of measures were not available in this survey.

knowledge on science and technology topics may help spur interest levels. It's not possible to parse out the causal mechanisms behind this association with these data.

2. Personality and interest in science, health topics

Beyond demographic differences, there is also an association between personality traits and interest in science and technology topics. In particular, Americans with a tendency to be open to new experiences, regardless of other characteristics, tend to express more interest in science and technology topics.

There is a long history of attention to personality differences in public thinking and engagement with public affairs. A number of recent studies have shown an association between personality traits and political attitudes and behaviors.8 Many of these studies evaluate a set of five personality traits (known as the Big Five) that are thought to comprise the main factors or dimensions of personality.9 These are openness to experience, conscientiousness, agreeableness, emotional stability and extroversion.

The Pew Research Center survey uses a set of 12 questions to create multi-item indices for each of the Big Five personality dimensions. Openness to experience, a dimension often described as

Rating personality traits

% of U.S. adults who describe themselves on a five-point scale as closer to each trait term

Openness to experience	%	%	%	%	%	
Creative						Conventional
thinker	21	29	32	11	4	thinker
Intellectual	25	42	27	3	2	Not intellectual
Analytical	23	31	32	5	4	Not analytical
Conscientiousness						
Hardworking	46	34	16	3	*	Lazy
Organized	24	34	27	12	2	Disorganized
Self-disciplined	18	32	34	12	3	Impulsive
Agreeableness						
Accepting of others	24	33	28	9	3	Critical of others
Sympathetic	35	37	21	4	2	Unsympathetic
Emotional stability						
Relaxed	16	32	32	16	4	Tense
Calm	20	33	30	12	4	Nervous
Extroversion						
Extroverted	12	21	41	15	5	Introverted
Outgoing	24	28	29	14	4	Shy

Note: Those saying don't know are not shown. Ratings are on a scale from 1 to 5 as shown for half the sample; other half of sample with endpoints reversed.

Source: American Trends Panel (wave 3) conducted April 29-May 27, 2014. Sample size = 3,243. PERS1-PERS12.

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⁸ For examples of this research, see Caprara, Vittorio Gian and Michele Vecchione. 2013. "Personality Approaches to Political Behavior" in *The Oxford Handbook of Political Psychology* Second Edition. New York: Oxford University Press, Gerber, Alan S. et al. 2011. "Personality Traits and Participation in Political Processes." *Journal of Politics* 73(3): 692-706, Mondak, Jeffrey J. 2010. *Personality and the Foundations of Political Behavior*. New York: Cambridge University Press.

⁹ See McCrae, R.R. and P.T. Costa. 2003. Personality in adulthood: A five factor theory perspective, Second Edition. New York: Guilford Press.

reflecting a tendency to think creatively and imaginatively, was measured based on average ratings of being a creative thinker (vs. a conventional thinker), being intellectual (vs. not intellectual) and being analytical (vs. not analytical). Conscientiousness, a trait linked with successful outcomes on achieving long-term goals, is based on the average ratings of being hardworking (vs. lazy), selfdisciplined (vs. impulsive) and organized (vs. disorganized). Agreeableness is based on two selfratings: being accepting of others (vs. critical of others) and of being sympathetic (vs. unsympathetic). This dimension is associated with a tendency to trust others. Emotional stability is based on ratings of being relaxed (vs. tense) and of being calm (vs. nervous). Those high in emotional stability tend to be less reactive to stress and report less anxiety. Extroversion is based on ratings of being extroverted (vs. introverted) and outgoing (vs. shy).

Self-ratings of personality traits

Americans tend to think of their personalities in positive terms across all five dimensions. Fully eight-in-ten adults consider themselves closer to "hardworking" on a 5-point scale; less than 4% see themselves as closer to "lazy," and 16% place themselves in the middle of the scale. The pattern leans in the same direction on other ratings. For example, some 72% of adults see themselves as closer to "sympathetic" than to "unsympathetic." And 67% think of themselves as closer to "intellectual" than to "not intellectual."

The analysis of personality traits takes this tendency into account by comparing people who, in relative terms, see themselves as more or less likely to reflect each trait across the set of ratings. On each personality index,¹⁰ respondents with

Personality trait indices

Mean rating (out of 5) on each index

	Mean
Openness to experience	3.70
Conscientiousness	3.79
Agreeableness	3.85
Emotional stability	3.47
Extroversion	3.36
O	

Source: American Trends Panel (wave 3) conducted April 29-May 27, 2014. Sample size = 3,243. PERS1-PERS12.

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average ratings above the overall mean were classified as "high" on that trait and those below the mean were classified as "low."

¹⁰ Alpha reliability coefficients for each index are as follows: 0.50 on openness to experience (three items), 0.55 on conscientiousness (three items); 0.51 on agreeableness (two items), 0.74 on emotional stability (two items) and 0.77 on extraversion (two items).

Interest in science and technology is related to openness to experience

Americans who are more open to experience on the three-item index are more likely than those who are less open to experience to say science and technology is of particular interest to them. Two-thirds of respondents higher on openness to experience say they are interested in science and technology topics, including 39% who rank science and technology among the topics of most interest to them. By contrast, 23% of those lower on openness to experience identify science and

technology topics as being of particular interest, while 52% say these topics are not of interest.

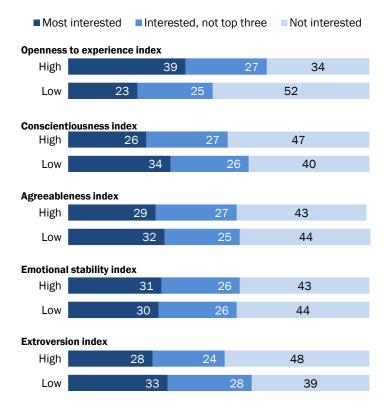
There are modest differences in interest on other Big Five traits. Some 26% of those with higher conscientiousness say science and technology is most interesting to them, compared with 34% of those lower on the conscientiousness index.

And introverts express more interest in science and technology topics than do extroverts; 61% of those lower on extroversion say they are interested in science and technology topics, compared with 52% among those higher on the extroversion scale.

There are no significant differences in science and technology interest by traits of agreeableness or emotional stability, however. And interest in health and medicine topics is not strongly associated with personality traits. Contrary to interest in science and technology, there is a tendency among women

Americans higher on openness to experience index are more likely to be interested in science and technology

% of online adults in each personality group by interest in science and technology topics



Note: Based on online adults who completed waves 1 through 9. "Interested, not top three" indicates those who said they were interested in science and technology, but did not say it was among the top three topics of interest.

Source: American Trends Panel (wave 1 and 3) conducted in 2014. Sample size = 1,815. PERS1-PERS12.

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who are *lower* on openness to experience to say health and medicine are in the top three topics of interest relative to women higher on openness to experience, but there is no association between openness to experience and interest in health and medicine among men. None of the other four personality traits are associated with interest in health and medicine topics.

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Methodology

The American Trends Panel (ATP), created by Pew Research Center, is a nationally representative panel of randomly selected U.S. adults living in households. Respondents who self-identify as internet users (representing 89% of U.S. adults) participate in the panel via monthly selfadministered web surveys, and those who do not use the internet participate via telephone or mail. The panel is being managed by Abt SRBI.

Data in this report are drawn from three waves of the panel. Wave 1 was conducted March 19-April 29, 2014, among 3,308 respondents (2,901 by Web and 407 by phone). Wave 3 was conducted April 29-May 27, 2014, among 3,243 respondents (2,906 by Web and 337 by mail). Wave 6 was conducted Aug. 11-Sept. 3, 2014, among 3,278 respondents (2,923 by Web and 355 by mail).

Some analyses in this report include comparison of responses across more than one wave. For this analysis, respondents were only included if they completed Wave 1 and Waves 3-9 (Wave 2 was a non-response follow-up and not considered a full panel survey). The sample size for those who completed Wave 1 and Waves 3-9 was 1,955 respondents (1,815 by Web and 140 by phone/mail).

The margin of sampling error for the full sample of 3,308 respondents in Wave 1 is plus or minus 2.2 percentage points. The margin of sampling error for the 2,901 Web-only respondents in Wave 1 is plus or minus 2.3 percentage points. The margin of sampling error for the full sample of 3,243 respondents in Wave 3 is plus or minus 2.3 percentage points. The margin of sampling error for the full sample of 3,278 respondents in Wave 6 is plus or minus 2.3 percentage points. The margin of sampling error for the 1,955 respondents who completed Wave 1 and Waves 3-9 is plus or minus 3.4 percentage points.

All current members of the American Trends Panel were originally recruited from the 2014 Political Polarization and Typology Survey, a large (n=10,013) national landline and cellphone random digit dial (RDD) survey conducted Jan. 23 to March 16, 2014, in English and Spanish. At the end of that survey, respondents were invited to join the panel. The invitation was extended to all respondents who use the internet (from any location) and a random subsample of respondents who do not use the internet.¹¹

Of the 10,013 adults interviewed, 9,809 were invited to take part in the panel. A total of 5,338 agreed to participate and provided either a mailing address or an email address to which a

¹¹ When data collection for the 2014 Political Polarization and Typology Survey began, non-internet users were subsampled at a rate of 25%, but a decision was made shortly thereafter to invite all non-internet users to join. In total, 83% of non-internet users were invited to join the panel.

welcome packet, a monetary incentive and future survey invitations could be sent. Panelists also receive a small monetary incentive after participating in each wave of the survey.

The ATP data were weighted for single waves in a multi-step process that begins with a base weight incorporating the respondents' original survey selection probability and the fact that some panelists were subsampled for invitation to the panel. Next, an adjustment was made for the fact that the propensity to join the panel varied across different groups in the sample. The final step in the weighting uses an iterative technique that matches gender, age, education, race, Hispanic origin and region to parameters from the U.S. Census Bureau's 2012 American Community Survey. Population density is weighted to match the 2010 U.S. Decennial Census. Telephone service is weighted to estimates of telephone coverage for 2014 that were projected from the July-December 2013 National Health Interview Survey. It also adjusts for party affiliation using an average of the three most recent Pew Research Center general public telephone surveys, and for internet use using as a parameter a measure from the 2014 Survey of Political Polarization.

The ATP data were also weighted for respondents who completed Wave 1 and Waves 3-9. This process was similar to weighting for single ATP waves except an additional adjustment was made to account for nonresponse to individual waves.

Sampling errors and statistical tests of significance take into account the effect of weighting. The Hispanic sample in the American Trends Panel is predominantly native born and English speaking.

The Web component of Wave 1 had a response rate of 61% (2,901 responses among 4,753 Webbased individuals enrolled in the panel); the telephone component had a response rate of 70% (407 responses among 585 non-Web individuals enrolled in the panel). Taking account of the response rate for the 2014 Survey of Political Polarization (10.6%), the cumulative response rate for the first ATP wave is 3.6%.

The Web component of Wave 3 had a response rate of 61% (2,906 responses among 4,740 Webbased individuals enrolled in the panel); the mail component had a response rate of 61% (337 responses among 553 non-Web individuals enrolled in the panel). Taking account of the response rate for the 2014 Survey of Political Polarization (10.6%), the cumulative response rate for ATP Wave 3 is 3.5%.

The Web component of Wave 6 wave had a response rate of 62% (2,923 responses among 4,702 Web-based individuals enrolled in the panel); the mail component had a response rate of 64% (355 responses among 559 non-Web individuals enrolled in the panel). Taking account of the

response rate for the 2014 Survey of Political Polarization (10.6%), the cumulative response rate for ATP Wave 6 is 3.6%.

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Topline questionnaire

PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL (WAVE 1) MARCH 19-APRIL 29, 2014 TOTAL N=3,308 WEB RESPONDENTS N=2,901 **PHONE RESPONDENTS N=407**

ASK ALL:

Q.1 Below is a list of topics that some people are interested in, and others are not. Click on the topics that you are interested in. You can click anywhere in each of the boxes to check the button. [RANDOMIZE] [ALLOW MULTIPLE ANSWERS]

March 19-Ar	oril 29, 2014 ¹²	
Based on	Based on web	
total	respondents	
[N=3,308]	[N=2,901]	
70	66	Health and medicine
61	57	Events in your community
59	58	Science and technology
58	57	Government and politics
53	48	Religion and spirituality
46	44	Entertainment and celebrities
44	41	Sports
43	40	Business and finance
41	40	Art and theater

ASK WEB RESPONDENTS ONLY:

ASK IF INTERESTED IN MORE THAN THREE TOPICS (Q1=1):

Of the topics you are interested in, which ones are you most interested in? Choose up to three. [KEEP 0.2 TOPICS IN SAME ORDER AND POSITION AS Q1]

BASED ON TOTAL:

March 19-April 29 <u>2014</u> Based on web respondents $[N=2,901]^{13}$ 37 Health and medicine 36

- Government and politics
- 32 Science and technology
- 28 Religion and spirituality
- 23 Sports
- 22 Events in your community
- Entertainment and celebrities 20
- Business and finance 16
- Art and theater 14

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

¹² Percentages add up to more than 100% because multiple answers were accepted.

¹³ Percentages add up to more than 100% because up to three responses were accepted. These percentages also include the responses of those who selected three or fewer topics in Q1, and thus were not asked Q2.

PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL (WAVE 3) APRIL 29-MAY 27, 2014 TOTAL N=3,243 WEB RESPONDENTS N=2,906 MAIL RESPONDENTS N=337

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

RANDOMIZE ORDER OF PERS1 THROUGH PERS12; RANDOMIZE OR ROTATE ORDER OF END LABLES FOR ITEMS WITH 1 ALWAYS BEING ON LEFT AND 5 ALWAYS ON THE RIGHT.

ASK ALL:

PERS1 Where would you place yourself on the following scale?

April 29-May 27

<u>2014</u>	
12	1 (Extroverted)
21	2
41	3
15	4
5	5 (Introverted)
5	No Answer

ASK ALL:

PERS2 Where would you place yourself on the following scale?

April 29-May 27

<u>2014</u>	
46	1 (Hardworking)
34	2
16	3
3	4
*	5 (Lazy)
1	No Answer

ASK ALL:

PERS3 Where would you place yourself on the following scale?

April 29-May 27

2014	
4	1 (Conventional thinker)
11	2
32	3
29	4
21	5 (Creative thinker)
2	No Answer

ASK ALL:

PERS4 Where would you place yourself on the following scale?

April 29-May 27

2014	
4	1 (Nervous)
12	2
30	3
33	4
20	5 (Calm)
1	No Answer

ASK ALL:

PERS5 Where would you place yourself on the following scale?

April 29-May 27

2014	
4	1 (Shy)
14	2
29	3
28	4
24	5 (Outgoing)
1	No Answer

ASK ALL:

PERS6 Where would you place yourself on the following scale?

April 29-May 27

2014	
18	1 (Self-disciplined)
32	2
34	3
12	4
3	5 (Impulsive)
1	No Answer

ASK ALL:

PERS7 Where would you place yourself on the following scale?

April 29-May 27

<u>2014</u>	
35	1 (Sympathetic)
37	2
21	3
4	4
2	5 (Unsympathetic)
1	No Answer

ASK ALL:

PERS8 Where would you place yourself on the following scale?

April 29-May 27

2014	
2	1 (Disorganized)
12	2
27	3
34	4
24	5 (Organized)
1	No Answer

ASK ALL:

PERS9 Where would you place yourself on the following scale?

April 29-May 27

2014	
23	1 (Analytical)
31	2
32	3
5	4
4	5 (Not analytical)
4	No Answer

ASK ALL:

PERS10 Where would you place yourself on the following scale?

April 29-May 27

<u>2014</u>	
16	1 (Relaxed)
32	2
32	3
16	4
4	5 (Tense)
1	No Answer

ASK ALL:

PERS11 Where would you place yourself on the following scale?

April 29-May 27

- 2014
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 1 (Critical of others)
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 5 (Accepting of others)
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 - 2 No Answer

ASK ALL:

PERS12 Where would you place yourself on the following scale?

April 29-May 27

123110921	
<u>2014</u>	
25	1 (Intellectual)
42	2
27	3
3	4
2	5 (Not intellectual)
2	No Answer

PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL (WAVE 6) AUGUST 11-SEPTEMBER 3, 2014 TOTAL N=3,278 WEB RESPONDENTS N=2,923 MAIL RESPONDENTS N=355

OTHER QUESTIONS PREVIOUSLY RELEASED OR HELD FOR FUTURE RELEASE

Factual knowledge questions about science based on a set of 12 multiple-choice questions. For more about the questions asked, see Pew Research Center report, <u>A Look at What the Public</u> Knows And Does Not Know About Science

% with TOTAL NUMBER CORRECT, KNOSCT1 THROUGH KNOSCT 12¹⁴

6	12 of 12 Correct
12	11 of 12 Correct
15	10 of 12 Correct
15	9 of 12 Correct
12	8 of 12 Correct
12	7 of 12 Correct
9	6 of 12 Correct
7	5 of 12 Correct
6	4 of 12 Correct
3	3 of 12 Correct
2	2 of 12 Correct
1	1 of 12 Correct
*	0 of 12 Correct
*	Refused all
7.9	Mean (out of 12)
8	Median (out of 12)

¹⁴ Figures in this table are based on N=3,269 and include all those who identified the gravitational pull of the moon in KNOSCT4 as correct. Alpha reliability coefficient based on the twelve items is .73.