

TABLE S7-1

## Public assessment of benefits and harms of scientific research, by respondent characteristic: 2018

(Percent)

Characteristic	Benefits strongly outweigh harmful results	Benefits slightly outweigh harmful results	Benefits are about equal to harmful results	Harmful results slightly outweigh benefits	Harmful results strongly outweigh benefits	Don't know
All adults (n = 1,175)	45	29	10	8	2	6
Sex						
Male (n = 485)	50	28	9	9	2	3
Female (n = 690)	42	30	11	7	2	8
Formal education						
Less than high school diploma (n = 137)	25	33	9	15	4	13
High school diploma (n = 362)	31	33	14	10	3	9
Some college (n = 330)	49	30	9	8	2	3
Bachelor's degree (n = 232)	62	22	8	2	2	4
Graduate or professional degree (n = 114)	73	20	5	2	0	1
Science and mathematics education <sup>a,b</sup>						
Low (n = 598)	37	32	12	9	3	7
Middle (n = 237)	48	29	8	9	2	4
High (n = 252)	69	22	6	2	1	1
Family income (quartile) <sup>b</sup>						
Bottom (n = 277)	32	30	13	13	3	8
Third (n = 223)	43	34	11	6	2	4
Second (n = 290)	43	34	7	7	4	6
Top (n = 287)	62	21	9	6	0	1
Age (years) <sup>b</sup>						
18–24 (n = 94)	42	23	16	12	2	5
25–34 (n = 225)	38	33	14	9	3	3
35–44 (n = 206)	46	28	11	7	3	5
45–54 (n = 190)	51	30	5	7	3	4
55–64 (n = 186)	53	25	4	5	1	11
65 or older (n = 269)	44	28	10	8	1	10
Correct answers to questions about basic scientific facts <sup>c</sup>						
Low (n = 227)	24	33	9	13	3	18
Middle (n = 512)	39	30	13	8	4	6
High (n = 436)	63	25	6	5	0	1

<sup>a</sup> For science and mathematics education, "low" equates to five or fewer high school and college science or mathematics courses, "middle" is six through eight courses, and "high" means nine or more courses.

<sup>b</sup> Categories do not add to total *n* because "don't know" responses and refusals to respond are not shown.

<sup>c</sup> Groupings are based on the number of correct answers to questions about basic scientific facts, with low corresponding to 0–3 correct answers, middle corresponding to 4–6 correct answers, and high corresponding to 7–9 correct answers. Responses of "don't know" and refusals to respond count as incorrect and are not shown. Questions asked about basic scientific facts are as follows:

- *The center of the Earth is very hot.* (True)

- *The continents have been moving their location for millions of years and will continue to move.* (True)

- *Does the Earth go around the Sun, or does the Sun go around the Earth?* (Earth around Sun)

- *How long does it take for the Earth to go around the Sun?* (One year) (Asked only if the respondent answered correctly that the Earth goes around the Sun)

- *All radioactivity is man-made.* (False)

- *Electrons are smaller than atoms.* (True)

- *Lasers work by focusing sound waves.* (False)

- *The universe began with a huge explosion.* (True)

- *It is the father's gene that decides whether the baby is a boy or a girl.* (True) or (in 2008) *It is the mother's gene that decides whether the baby is a boy or a girl.* (False) (Split ballot in 2008; 1,506 survey respondents were asked about "father's gene"; 515 survey respondents were asked about "mother's gene.")

- *Antibiotics kill viruses as well as bacteria.* (False)

- *Human beings, as we know them today, developed from earlier species of animals.* (True)

**Note(s)**

Responses are to the following: *People have frequently noted that scientific research has produced benefits and harmful results. Would you say that, on balance, the benefits of scientific research have outweighed the harmful results, or have the harmful results of scientific research been greater than its benefits?* Percentages may not add to 100% because of rounding.

**Source(s)**

NORC at the University of Chicago, General Social Survey (2018).

*Science and Engineering Indicators*