2022 PEW RESEARCH CENTER'S AMERICAN TRENDS PANEL **WAVE 119 INTERNET & SCIENCE TOPLINE DECEMBER 12-18, 2022** N=11,004

NOTE: ALL NUMBERS ARE PERCENTAGES UNLESS OTHERWISE NOTED. THE PERCENTAGES LESS THAN 0.5% ARE REPLACED BY AN ASTERISK (*). ROWS/COLUMNS MAY NOT TOTAL 100% DUE TO ROUNDING.

		Margin of error at 95%
	Sample size	confidence level
U.S. adults	11,004	+/- 1.4 percentage points

ASK ALL:

DESRISK How well do each of the following phrases describe you? [RANDOMIZE ITEMS]

		Extremely well	Very well	Somewhat <u>well</u>	Not too <u>well</u>	Not at all <u>well</u>	No answer
COMF.	Comfortable taking risks Dec 12-18, 2022	8	20	45	24	4	*
CREAT.	Creative thinker Dec 12-18, 2022	20	34	36	8	1	*
NTECH.	Enjoy using new technology Dec 12-18, 2022	21	28	36	13	2	*

ASK ALL:

RISK2

Thinking about the decisions you make as you go through life, which better describes how you feel? [RANDOMIZE RESPONSE OPTIONS]

Taking risks usually pays off in the end 55 Taking risks too often leads to problems 44 1 No answer

Artificial intelligence (AI) is designed to learn tasks that humans typically do, for instance **ASK ALL:**

recognizing speech or pictures.

AI HEARD How much have you heard or read about AI?

Dec 12-18, 2022

26	A lot
59	A little
15	Nothing at all
*	No answer

CNCEXC

Overall, would you say the increased use of artificial intelligence (AI) in daily life makes you feel... [RANDOMIZE RESPONSE OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]

	More excited than	More concerned	Equally concerned	
	<u>concerned</u>	than excited	and excited	No answer
Dec 12-18, 2022	15	38	46	1
Nov 1-7, 2021 ¹	18	37	45	*

ASK ALL:

USEAI

Just your impression, how often do you interact with artificial intelligence (AI)?

Dec 12-18, 2022	
5	Almost constantly
23	Several times a day
13	About once a day
15	Several times a week
44	Less often
1	No answer

DISPLAY TO ALL:

We are interested in what people know off the top of their head about artificial intelligence (AI). You may find some of these questions easy and others difficult. (If you don't know the answer, select "Not sure.")

AIKNOW1

Thinking about customer service, which of the following uses artificial intelligence (AI)? **[RANDOMIZE RESPONSE OPTIONS 1-4]**

Dec 12-18, 2022	
65	A chatbot that immediately answers customer questions (CORRECT)
8	An online survey sent to customers that allows them to provide feedback
2	A contact page with a form available to customers to provide feedback
4	A detailed Frequently Asked Questions webpage
20	Not sure
*	No answer

RANDOMIZE AIKNOW2-AIKNOW7

¹ For the Nov. 1-7, 2021 survey, the question wording was "Artificial intelligence computer programs are designed to learn tasks that humans typically do, for instance recognizing speech or pictures. Overall, would you say the increased use of artificial intelligence computer programs in daily life makes you feel..."

AIKNOW2 When playing music, which of the following uses artificial intelligence (AI)?

[RANDOMIZE RESPONSE OPTIONS 1-4]

Dec 12-18, 2022	
9	Using Bluetooth to connect to wireless speakers
57	A playlist recommendation (CORRECT)
8	A wireless internet connection to stream the musi-
5	Shuffle play from a chosen playlist
21	Not sure
*	No answer

ASK ALL:

AIKNOW3 When using email, which of the following uses artificial intelligence (AI)? [RANDOMIZE RESPONSE OPTIONS 1-4]

Dec 12-18, 2022	
5	The email service marking an email as read after the user opens it
	The email service allowing the user to schedule an email to send at a specific time
13	in the future
51	The email service categorizing an email as spam (CORRECT)
4	The email service sorting emails by time and date
27	Not sure
1	No answer

NO AIKNOW4

ASK ALL:

AIKNOW5 Thinking about health products, which of the following uses artificial intelligence (AI)? [RANDOMIZE RESPONSE OPTIONS 1-4]

Dec 12-18, 2022	
68	Wearable fitness trackers that analyze exercise and sleeping patterns (CORRECT)
3	Thermometers that are placed under someone's tongue to detect a fever
3	At-home COVID-19 tests
4	Pulse oximeters that measure a person's oxygen level of the blood
22	Not sure
1	No answer

ASK ALL:

AIKNOW6 Thinking about online shopping, which of the following uses artificial intelligence (AI)?

[RANDOMIZE RESPONSE OPTIONS 1-4]

<u>Dec 12-18, 2022</u>	
7	Storage of account information, such as shipping addresses
5	Records of previous purchases
64	Product recommendations based on previous purchases (CORRECT)
3	Product reviews from other customers
20	Not sure
1	No answer

AIKNOW7

Thinking about devices in the home, which of the following uses artificial intelligence (AI)? [RANDOMIZE RESPONSE OPTIONS 1-4]

Dec 12-18, 2022	
8	Programming a home thermostat to change temperatures at certain times
	A security camera that sends an alert when there is an unrecognized person at the
62	door (CORRECT)
5	Programming a timer to control when lights in a home turn on and off
3	An indicator light that turns red when a water filter needs to be replaced
21	Not sure
1	No answer

ASK ALL:

AIHCCOMF

Thinking about the use of artificial intelligence (AI) in health and medicine to do things like diagnose disease and recommend treatments...

How would you feel if your health care provider relied on AI to do things like diagnose disease and recommend treatments for your medical care? [RANDOMLY DISPLAY OPTIONS 1-4 OR 4-1]

Dec 12-18, 2022	
7	Very comfortable
32	Somewhat comfortable
37	Somewhat uncomfortable
23	Very uncomfortable
1	No answer

ASK ALL:

AIHCTRT1

Do you think the use of artificial intelligence (AI) in health and medicine to do things like diagnose disease and recommend treatments would lead to... [RANDOMIZE RESPONSE OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]

Dec 12-18, 2022	
38	Better health outcomes for patients
33	Worse health outcomes for patients
27	Not make much difference
2	No answer

ASK ALL:

AIHCTRT2

Thinking about the use of artificial intelligence (AI) in health and medicine to do things like diagnose disease and recommend treatments, which of the following concerns you more?

Health care providers will... [RANDOMIZE RESPONSE OPTIONS]

Dec 12-18, 2022	
75	Move too fast using this technology, before fully understanding the risks for patients
	Move too slowly using this technology, missing opportunities to improve patients'
23	health
2	No answer

MEDBIAS

In health and medicine, how much of a problem is bias and unfair treatment based on patients' race or ethnicity?

Dec 12-18, 2022

35	A major problem
35	A minor problem
28	Not a problem
2	No answer

ASK ALL:

AIHCCHG

Do you think the use of artificial intelligence (AI) in health and medicine to do things like diagnose diseases and recommend treatments would make each of the following better, worse, or not make much difference? **[RANDOMIZE ITEMS]**

		<u>Better</u>	<u>Worse</u>	Not make much <u>difference</u>	No answer
QUAL.	The quality of health care for people like you Dec 12-18, 2022	31	30	38	1
MIST.	The number of mistakes made by health care providers Dec 12-18, 2022	40	27	31	1
REL.	Patients' personal				
KLL.	relationship with their health care providers Dec 12-18, 2022	13	57	29	1
RACETHN.	The job that health care providers do treating people of all races and ethnicities fairly				
	Dec 12-18, 2022	38	15	46	1
SECUR.	The security of patients' personal health records Dec 12-18, 2022	22	37	39	1
	,				

HCMEDBIAS

Thinking about the potential for bias and unfair treatment in health and medicine based on a patient's race or ethnicity...

If artificial intelligence (AI) is used more in health and medicine to do things like diagnose disease and recommend treatments, do you think the issue of bias and unfair treatment based on a patient's race or ethnicity would... [RANDOMLY DISPLAY OPTIONS 1-5 OR 5-1]

Dec 12-18, 2022	
9	Definitely get better
35	Probably get better
40	Stay about the same
10	Probably get worse
3	Definitely get worse
2	No answer

ASK IF BETTER AND FORM 2 (HCMEDBIAS=1,2 AND XFORM=2)] [N=2,531]:

BIASBETR

What's a reason you think the issue of bias and unfair treatment based on a patient's race or ethnicity would get better with the use of artificial intelligence (AI) in health and medicine? [OPEN-END RESPONSE, CODED ANSWERS SHOWN BELOW]

Dec 12-18, 2022	
34	Human bias/prejudice not involved; AI is neutral/consistent
28	AI is not biased towards a patient's characteristics
9	Programmers or datasets could input bias into the AI
4	AI can make more accurate decisions, including based on a person's race
1	AI will still have some bias, but can help
6	Other
3	Unclear
2	Don't know
24	No answer

ASK IF WORSE AND FORM 2 (HCMEDBIAS=4,5 AND XFORM=2)] [N=683]:

BIASWORS

What's a reason you think the issue of bias and unfair treatment based on a patient's race or ethnicity would get worse with the use of artificial intelligence (AI) in health and medicine? [OPEN-END RESPONSE, CODED ANSWERS SHOWN BELOW]

Dec 12-18, 2022	
26	AI reflects human biases
9	Human judgement is needed in medicine
4	AI would take into account race/ethnicity, making it biased
3	Don't like AI/Don't want it involved in health care
2	More use of AI would increase inequality, only available for the rich
1	Medical providers would use AI to reinforce their own biases/might not be aware of biases
1	Data privacy and security concerns
1	Data entry, medical record errors
1	Programming will determine whether it is biased or not
1	AI does not take into account race/ethnicity
1	No racism or bias exists in healthcare
8	Other
3	Unclear
3	Don't know
40	No answer

ASK IF STAY ABOUT THE SAME AND FORM 2 (HCMEDBIAS=3 AND XFORM=2)] [N=2,195]:

BIASSAME

What's a reason you think the issue of bias and unfair treatment based on a patient's race or ethnicity would stay about the same with the use of artificial intelligence (AI) in health and medicine? [OPEN-END RESPONSE, CODED ANSWERS SHOWN BELOW]

Dec 12-18, 2022	
18	Because people, training or data are still biased
16	Racial and ethnic bias is not a problem, doesn't exist or race and ethnicity isn't relevant to healthcare
6	A real person/doctor would be primarily treating people even if we adopted AI, so no change expected
4	Individual bias is possible, but good doctors are not biased
3	It would stay the same/AI wouldn't make a difference/there will always be a problem
2	Negative toward implementation of AI, general
2	AI can't even detect race or doesn't take into account race
1	AI is unbiased, will affect everyone equally
1	AI will only be accessible to the privileged, so it will not change things much
1	Negative toward healthcare system, general
1	Bias is caused by factors that AI cannot solve
4	Other
1	Unclear
4	Don't know
38	No answer

[RANDOMIZE ORDER OF BLOCK 1 AND BLOCK 2]

BLOCK 1

DISPLAY TO FORM 1:

Artificial intelligence (AI) can be used to review large numbers of images of people's skin with and without skin cancer and learn to identify patterns; it is designed to detect skin cancer in patients.

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

SCDETECT1 How much have you heard or read about AI designed to detect skin cancer?

Dec 12-18, 2022	
3	A lot
19	A little
77	Nothing at all
*	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

SCDETECT2 How much of an advance for medical care is artificial intelligence (AI) that can detect skin cancer?

Dec 12-18, 2022	
45	A major advance
17	A minor advance
3	Not an advance
34	Not sure
*	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

SCDETECT3 Would you personally want artificial intelligence (AI) to be used in your screening for skin cancer, if you were getting screened? [RANDOMLY DISPLAY OPTIONS 1-4 OR 4-1]

<u>Dec 12-18, 2022</u>	
17	Definitely want
48	Probably want
24	Probably NOT want
10	Definitely NOT want
2	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

SCDETECT4 Do you think artificial intelligence (AI) would make skin cancer diagnoses...

[RANDOMIZE RESPONSE OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]

Dec 12-18, 2022	
55	More accurate
13	Less accurate
30	Not make much difference
3	No answer

BLOCK 2 DISPLAY FOR FORM 1:

There are artificial intelligence (AI) chatbots in which people text AI programs about their feelings or concerns and the chatbot responds, without the involvement of a human. These chatbots are designed to support a person's mental health.

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

AIMH1 How much have you heard or read about AI chatbots designed to support mental health?

Dec 12-18, 2022	
6	A lot
25	A little
68	Nothing at all
*	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

AIMH2 How much of an advance for mental health support are artificial intelligence (AI) chatbots?

Dec 12-18, 2022	
11	A major advance
21	A minor advance
20	Not an advance
47	Not sure
*	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

AIMH3 Would you personally want to use an artificial intelligence (AI) chatbot, if you were seeking mental health support? [RANDOMLY DISPLAY OPTIONS 1-4 OR 4-1]

Dec 12-18, 2022	
4	Definitely want
16	Probably want
41	Probably NOT want
38	Definitely NOT want
1	No answer

ASK FORM 1 ONLY (XFORM=1) [N=5,511]:

AIMH5 Do you think artificial intelligence (AI) chatbots that can provide mental health support should be... [RANDOMIZE RESPONSE OPTIONS 1-2 WITH OPTION 3 ALWAYS LAST]

<u>Dec 12-18, 2022</u>	
46	Only used by people that are also seeing a human therapist
23	Used by people regardless of whether they are also seeing a human therapist
28	These should not be available to people at all
3	No answer

[RANDOMIZE ORDER OF BLOCK 3 AND BLOCK 4] BLOCK 3 DISPLAY TO FORM 2:

Artificial intelligence (AI) can be used to help decide the amount of pain medication patients get following a major surgery. These programs are designed to limit the abuse of pain medications.

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

AIPAIN1 How much have you heard or read about using AI to help decide the amount of pain medication patients get?

Dec 12-18, 2022	
3	A lot
19	A little
77	Nothing at all
1	No answer

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

AIPAIN2 How much of an advance for medical care is artificial intelligence (AI) that can help decide the amount of pain medication patients get?

Dec 12-18, 2022	
19	A major advance
24	A minor advance
16	Not an advance
40	Not sure
1	No answer

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

AIPAIN3

Would you personally want artificial intelligence (AI) to help decide the amount of pain medication you get, if you were getting surgery? **[RANDOMLY REVERSE SCALE FOR HALF]**

Dec 12-18, 2022	
5	Definitely want
26	Probably want
39	Probably NOT want
27	Definitely NOT want
2	No answer
	•

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

AIPAIN4 Do you think artificial intelligence (AI) would make patients' treatment for pain...

[RANDOMIZE RESPONSE OPTIONS 1 AND 2, WITH OPTION 3 ALWAYS LAST]

Dec 12-18, 2022	
26	Better
32	Worse
40	Not make much difference
3	No answer

BLOCK 4

DISPLAY TO FORM 2:

Robots with artificial intelligence (AI) are being developed that can be used to perform parts of surgery on their own. These robots are designed to make precise and steady movements during surgery.

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

SROBOT1 How much have you heard or read about surgical robots with AI?

Dec 12-18, 2022	
9	A lot
50	A little
40	Nothing at all
1	No answer

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

SROBOT2 How much of an advance for medical care are surgical robots with artificial intelligence (AI) that can perform parts of surgery on their own?

Dec 12-18, 2022	
45	A major advance
18	A minor advance
7	Not an advance
30	Not sure
1	No answer

ASK FORM 2 ONLY (XFORM=2) [N=5,493]:

SROBOT3 Would you personally want surgical robots with artificial intelligence (AI) to be used, if you were getting surgery? **[RANDOMLY REVERSE SCALE FOR HALF]**

Dec 12-18, <u>2022</u>	
6	Definitely want
33	Probably want
37	Probably NOT want
22	Definitely NOT want
2	No answer

RANDOMIZE BLOCKS 5-7 (FORM 2 ONLY RECEIVES BLOCK 7)

BLOCK 5

DISPLAY TO FORM 1 (XFORM=1):

Artificial intelligence (AI) can be used in biology to predict protein structures in cells. This can help develop new medical treatments.

ASK FORM 1 (XFORM=1) [N=5,511]:

AIPROT1 How much have you heard or read about using AI to predict protein structures in people's cells?

Dec 12-18, 2022	
3	A lot
18	A little
79	Nothing at all
1	No answer

ASK FORM 1 (XFORM=1) [N=5,511]:

AIPROT2 How much of an advance for medical research is using artificial intelligence (AI) to predict protein structures in people's cells?

Dec 12-18, 2022	
33	A major advance
16	A minor advance
3	Not an advance
47	Not sure
*	No answer

BLOCK 6

DISPLAY TO FORM 1 (XFORM=1):

Artificial intelligence (AI) can be used to recommend which varieties of plants to breed in order to produce crops that can withstand drought and heat.

ASK FORM 1 (XFORM=1) [N=5,511]:

AICROP1 How much have you heard or read about using AI to produce drought and heat-resistant crops?

Dec 12-18, 2022	
3	A lot
22	A little
74	Nothing at all
1	No answer

ASK FORM 1 (XFORM=1) [N=5,511]

AICROP2 How much of an advance for agriculture is using artificial intelligence (AI) to produce drought and heat-resistant crops?

Dec 12-18, 2022	
37	A major advance
19	A minor advance
6	Not an advance
37	Not sure
*	No answer

BLOCK 7

DISPLAY TO FORM 2 (XFORM=2):

Artificial intelligence (AI) can be used to predict when and where extreme weather like heavy rainfall or storms is likely to occur.

ASK FORM 2 (XFORM=2) [N=5,493]:

AIEXT1 How much have you heard or read about using AI to predict when and where extreme weather is likely to occur?

Dec 12-18, 2022	
8	A lot
39	A little
53	Nothing at all
1	No answer

ASK FORM 2 (XFORM=2) [N=5,493]:

AIEXT2 How much of an advance for weather forecasting is using artificial intelligence (AI) to predict when and where extreme weather is likely to occur?

Dec 12-18, 2022	
38	A major advance
28	A minor advance
6	Not an advance
28	Not sure
1	No answer

END BLOCK 7

DISPLAY TO FORM 1 (XFORM=1):

Artificial intelligence (AI) can be used to write articles that report on news events and information.

ASK FORM 1 (XFORM=1) [N=5,511]:

AINEWS1 How much have you heard or read about using AI to write news articles?

Dec 12-18, 2022	
8	A lot
25	A little
66	Nothing at all
1	No answer

ASK FORM 1 (XFORM=1) [N=5,511]:

AINEWS2 How much of an advance for the news media is using artificial intelligence (AI) to write news articles?

Dec 12-18, 2022	
10	A major advance
19	A minor advance
34	Not an advance
36	Not sure
1	No answer

DISPLAY TO FORM 2 (XFORM=2):

Artificial intelligence (AI) can be used to produce visual images from keywords a person types into the system. It can be used to produce complex, artistic images.

ASK FORM 2 (XFORM=2) [N=5,493]:

AIIMAG1 How much have you heard or read about using AI to produce visual images from keywords?

Dec 12-18, 2022	
15	A lot
29	A little
55	Nothing at all
1	No answer

ASK FORM 2 (XFORM=2) [N=5,493]:
AIIMAG2 How much of an advance for the visual arts is using artificial intelligence (AI) to produce visual images from keywords?

Dec 12-18, 2022	
20	A major advance
26	A minor advance
14	Not an advance
39	Not sure
1	No answer

EMPLSIT What is your current work situation?

Dec 12-18, 2022		Oct 10-16, 2022
48	Work full time for pay	48
12	Work part time for pay	12
11	Not currently working for pay	12
7	Unable to work due to a disability	8
21	Retired	20
1	No answer	1

ASK ALL:

JOBAPPYR Have you applied for a job at any point in the past 12 months?

Dec 12-18, 2022	
26	Yes, I have
73	No, I have not
*	No answer

ASK IF CURRENTLY WORKING FOR PAY (EMPLSIT=1-2) [N=6,497]: INDUSTRY What industry or field do you currently work in?²

Dec 12-18, 2022	
8	Hospitality or service
16	Health care and social assistance
12	Manufacturing, mining, or construction
10	Retail and trade
10	Education
7	Banking, finance, accounting, real estate, or insurance
5	Transportation
7	Government, public administration, or military
8	Information/Technology
1	Agriculture, forestry, fishing, and hunting
9	Professional, scientific, and technical services
2	Arts, entertainment, and recreation
3	Other [TEXT BOX - RESPONSES NOT SHOWN]
*	No answer

² INDUSTRY was also asked in Wave 77, but in that wave was only asked of those who were currently employed full- or part-time and had only one job or considered one of their multiple jobs their primary job.

DISPLAY TO ALL:

AIWRK1

Artificial intelligence (AI) can be used by employers to collect and analyze data, make decisions and complete tasks. Some employers are using AI in hiring, for worker evaluations or even to do jobs humans used to do.

ASK ALL:

AIWRK2

Over the next 20 years, how much impact do you think the use of artificial intelligence (AI) in the workplace will have on... **[RANDOMIZE ITEMS]**

		A major impact	A minor impact	No impact	Not sure	No answer
a.	Workers generally Dec 12-18, 2022	62	21	2	15	*
b.	You, personally Dec 12-18, 2022	28	35	19	19	*
c.	The U.S. economy Dec 12-18, 2022	56	22	3	19	*

ASK ALL:

AIWRK3

Thinking about the use of artificial intelligence (AI) in the workplace over the next 20 years, what do you think the outcome will be for... [RANDOMIZE ITEMS IN SAME ORDER AS AIWRK2; RANDOMLY DISPLAY RESPONSE OPTIONS 1-3 OR 3-1 IN SAME ORDER FOR EACH ITEM, WITH OPTION 9 ALWAYS LAST]

		AI will help more than it <u>hurts</u>	AI will equally help <u>and hurt</u>	AI will hurt more than it <u>helps</u>	<u>Not sure</u>	No answer
a.	Workers generally Dec 12-18, 2022	13	32	32	22	1
b.	You, personally Dec 12-18, 2022	16	30	15	38	1
c.	The U.S. economy Dec 12-18, 2022	19	34	20	27	*

DISPLAY TO ALL:

Thinking now about how AI can be used in hiring...

ASK ALL:

AIWRKH1

How much have you heard or read about artificial intelligence (AI) being used by employers in the hiring process?

Dec 12-18, 2022

7 A lot
32 A little
61 Nothing at all
* No answer

AIWRKH2 Would you favor or oppose employers' use of artificial intelligence (AI) for...

		<u>Favor</u>	<u>Oppose</u>	Not sure	No answer
a.	Reviewing job applications Dec 12-18, 2022	28	41	30	*
b.	Making a final hiring decision Dec 12-18, 2022	7	71	22	*

ASK ALL:

AIWRKH3

Do you think artificial intelligence (AI) would do better, worse or about the same as humans at... [RANDOMIZE ITEMS; RANDOMIZE RESPONSE OPTIONS 1 AND 2 IN SAME ORDER FOR EACH ITEM, WITH OPTIONS 3 AND 9 ALWAYS LAST]

a.	Identifying job applicants who	AI would do a <u>better</u> job <u>than humans</u>	AI would do a <u>worse</u> job <u>than humans</u>	AI would do about the same job as <u>humans</u>	Not sure	No answer
a.	are well-qualified Dec 12-18, 2022	27	23	26	23	1
b.	Treating all job applicants in the same way Dec 12-18, 2022	47	15	14	23	1
c.	Seeing potential in job applicants who may not perfectly fit the job description Dec 12-18, 2022	17	44	14	25	1
d.	Figuring out which job applicants would work well with their coworkers Dec 12-18, 2022	13	43	16	28	1

ASK ALL:

AIWRKH4

If you were looking for work, would you want to apply for a job with an employer that uses artificial intelligence (AI) to help make hiring decisions?

Dec 12-18, 2022	Dec	12-:	18,	20	22
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32	Yes, I would
66	No, I would not
2	No answer

ASK IF WOULD WANT TO APPLY FOR A JOB WITH AN EMPLOYER THAT USES AI TO HELP MAKE HIRING DECISIONS (AIWRKH4=1) [N=3,754]:

AIWRKH5Y

What is the main reason you would want to apply for a job with an employer that uses artificial intelligence (AI) to help make hiring decisions? [OPEN-END RESPONSE, CODED ANSWERS SHOWN BELOW]

Dec 12-18, 2022	
28	AI would be objective, fair, have little to no bias, treat people equally
14	AI isn't going to stop them from applying, they don't care if AI is involved
9	AI would be thorough, accurate (possibly more so than humans)
4	They personally would benefit if AI were used in the process
4	Humans should be in the mix, AI shouldn't act alone
4	They are curious, want to try or test it out
4	AI saves time, wastes less time, is quicker
2	Using AI shows that the company is advanced
2	This is the way of the future
1	AI makes them feel more comfortable, less nervous
1	AI can't be worse than the current process
5	Other
29	Don't know/No answer

ASK IF WOULD NOT WANT TO APPLY FOR A JOB WITH AN EMPLOYER THAT USES AI TO HELP MAKE HIRING DECISIONS (AIWRKH4=2) [N=7,017]:

AIWRKH5N

What is the main reason you would not want to apply for a job with an employer that uses artificial intelligence (AI) to help make hiring decisions? [OPEN-END RESPONSE, CODED ANSWERS SHOWN BELOW]

AI would miss the "human factor" hiring needs
AI makes mistakes, screens out qualified candidates, has design flaws
They do not trust or feel comfortable with AI or technology generally
They personally would be at a disadvantage if AI were used in the process
They do not know or understand enough about AI to say
There is potential for bias, unfair treatment, discrimination
Using AI reflects poorly on the company or its values
AI systems can be taken advantage of or misused
The technology is not ready
It depends on the situation
Other
Don't know/No answer

ASK ALL:

HIREBIAS1

In hiring generally, how much of a problem is bias and unfair treatment based on job applicants' race or ethnicity?

Dec 12-18, 2022	
37	A major problem
42	A minor problem
19	Not a problem
2	No answer

ASK IF THINK BIAS AND UNFAIR TREATMENT IN HIRING IS A PROBLEM (HIREBIAS1=1,2) [N=8,911]:

HIREBIAS2

If artificial intelligence (AI) is used more by employers in the hiring process, do you think the issue of bias and unfair treatment based on job applicants' race or ethnicity would... **[RANDOMLY DISPLAY RESPONSE OPTIONS 1-5 OR 5-1]**

Dec 12-18, 2022

10	Definitely get better
44	Probably get better
32	Stay about the same
9	Probably get worse
4	Definitely get worse
2	No answer

COMBINED HIREBIAS1/HIREBIAS2 BASED ON ALL ADULTS:

Dec 12-18, 2022	
	Think bias and unfair treatment based on job applicants' race or ethnicity is a major/minor problem in hiring generally; and if AI is used more by employers in
79	the hiring process, this issue would
8	Definitely get better
34	Probably get better
25	Stay about the same
7	Probably get worse
3	Definitely get worse
1	No answer to HIREBIAS2
	Think bias and unfair treatment based on job applicants' race or ethnicity is not a
19	problem in hiring generally
2	No answer to HIREBIAS1

DISPLAY TO ALL:

Thinking about another way employers may use artificial intelligence (AI)...

ASK ALL:

AIWRKM1 How much have you heard or read about employers' use of AI to collect and analyze

information about how workers are doing their jobs?

<u>Dec 12-18, 2022</u>	
6	A lot
31	A little
62	Nothing at all
1	No answer

ASK ALL:

AIWRKM2 Do you favor or oppose employers' use of artificial intelligence (AI) to do each of the following? [RANDOMIZE ITEMS]

		<u>Favor</u>	<u>Oppose</u>	Not sure	No answer
a.	Keeping track of when office workers are at their desks Dec 12-18, 2022	20	56	24	1
b.	Recording exactly what people are doing on their work computers Dec 12-18, 2022	27	51	22	1
c.	Tracking workers' movements while they work Dec 12-18, 2022	15	61	23	1
d.	Monitoring workers' driving behavior as they make trips for the company Dec 12-18, 2022	43	34	23	1
e.	Evaluating how well people are doing their jobs Dec 12-18, 2022	31	39	29	1
f.	Analyzing how retail workers interact with customers Dec 12-18, 2022	34	37	28	1

AIWRKM3

Do you think each of the following would happen if employers used artificial intelligence (AI) to collect and analyze information about how workers are doing their jobs? [RANDOMIZE ITEMS; RANDOMLY DISPLAY RESPONSE OPTIONS 1-4 OR 4-1 IN SAME ORDER FOR EACH ITEM, WITH OPTION 9 ALWAYS LAST]

		Definitely would <u>happen</u>	Probably would <u>happen</u>	Probably would not <u>happen</u>	Definitely would not <u>happen</u>	Not sure	No answer
a.	Workers would all be evaluated in the same way Dec 12-18, 2022	9	32	25	10	24	1
b.	Information collected about workers would be misused Dec 12-18, 2022	25	41	10	3	20	1
c.	Workplace security would be improved Dec 12-18, 2022	10	39	18	5	26	1
d.	Inappropriate behavior in the workplace would decrease Dec 12-18, 2022	9	37	23	6	25	1
e.	Companies' profits would increase Dec 12-18, 2022	9	29	18	4	39	1
f.	Workers would feel like they were being inappropriately watched Dec 12-18, 2022	52	29	4	2	13	1

ASK ALL:

AIWRKM4

Do you favor or oppose employers using information collected and analyzed by artificial intelligence (AI) about how people are doing their jobs to decide whether someone... **[RANDOMIZE ITEMS]**

		<u>Favor</u>	<u>Oppose</u>	Not sure	No answer
a.	Gets a promotion Dec 12-18, 2022	22	47	30	1
b.	Is fired Dec 12-18, 2022	14	55	29	1

EVALBIAS1 In performance evaluations generally, how much of a problem is bias and unfair

treatment based on workers' race or ethnicity?

Dec 12-18, 2022 A major problem 31 44 A minor problem 23 Not a problem 3 No answer

ASK IF THINK BIAS AND UNFAIR TREATMENT IN PERFORMANCE EVALUATIONS IS A PROBLEM (EVALBIAS=1,2) [N=8,371]:

EVALBIAS2

If artificial intelligence (AI) is used more by employers in performance evaluations, do you think the issue of bias and unfair treatment based on workers' race or ethnicity would... [RANDOMLY REVERSE SCALE FOR HALF]

Dec 12-18, 2022	
6	Definitely get better
40	Probably get better
40	Stay about the same
9	Probably get worse
4	Definitely get worse
1	No answer

COMBINED EVALBIAS1/EVALBIAS2 BASED ON ALL ADULTS:

Dec 12-18, 2022	
	Think bias and unfair treatment based on job applicants' race or ethnicity is a major/minor problem in performance evaluations generally; and if AI is used
74	more by employers in the hiring process, this issue would
5	Definitely get better
30	Probably get better
29	Stay about the same
7	Probably get worse
3	Definitely get worse
1	No answer to EVALBIAS2
	Think bias and unfair treatment based on workers' race or ethnicity is not a
23	problem in performance evaluations generally
3	No answer to EVALBIAS1

ASK ALL:

FACERECWK1 The next questions are about facial recognition technology, which can identify someone by scanning their face in photos, videos or in real time.

> How much have you heard or read about employers' use of facial recognition technology in the workplace?

Dec 12-18, 2022	
14	A lot
47	A little
38	Nothing at all
1	No answer

FACERECWK2 Would you favor or oppose employers' use of facial recognition technology for each of the following purposes? **[RANDOMIZE ITEMS]**

		<u>Favor</u>	<u>Oppose</u>	Not sure	No answer
a.	Automatically tracking the attendance of their employees Dec 12-18, 2022	45	35	20	1
b.	Analyzing employees' facial expressions Dec 12-18, 2022	9	70	20	1
c.	Tracking how often workers take breaks Dec 12-18, 2022	25	52	22	1

ASK ALL:

FACERECWK3 Do you think each of the following would happen due to employers' use of facial recognition technology in the workplace? The technology would... [RANDOMIZE ITEMS; RANDOMLY DISPLAY OPTIONS 1-4 OR 4-1 IN SAME ORDER FOR EACH ITEM, WITH OPTION 9 ALWAYS LAST]

		Definitely would <u>happen</u>	Probably would <u>happen</u>	Probably would not <u>happen</u>	Definitely would not <u>happen</u>	Not <u>sure</u>	No <u>answer</u>
a.	Misidentify a worker as someone they're not Dec 12-18, 2022	14	39	22	4	21	1
b.	Recognize some skin tones better than others Dec 12-18, 2022	17	34	12	5	31	1
C.	Misinterpret workers' facial expressions Dec 12-18, 2022	30	43	7	3	17	1