



3M | Futures

United States Survey Results

United States

The 3M Futures Study was conducted across 11 countries to understand global perceptions of science and technology innovation—and its role in society.

The survey also highlighted Artificial Intelligence, Augmented & Virtual Reality, Sustainability and “The New Paradigm,” an area focused on the pandemic’s impact on our lives.

France – Brazil – China – Mexico – Canada – Japan – Germany – UK – USA – India – South Korea

Key Findings — Science & Technology Perceptions



1

Americans believe it's most important for science and technology to prioritize a cure for Alzheimer's and dementia, preparing for global pandemics and health crises, and solving humanitarian crises like immigration, famine, conflict and extreme poverty in the next 5 years.

2

While most of the impacts of science and technology are perceived as having a positive impact over the past 10 years and are believed to continue to have a positive impact in the next 10 years, Americans feel that social media has had and will have a negative impact on society.

Methodology: This poll was conducted between November 17-November 22, 2021 among a sample of 2000 Adults. The interviews were conducted online. An oversample of N=200 of was also fielded among those 18-24 – The interviews were conducted online. Results from the full survey have a margin of error of plus or minus 2 percentage points.

Key Findings — AI (Artificial Intelligence)



1

Most believe that artificial intelligence (AI) plays a significant role in their everyday life and believe it will increase in the next 5 years.

- However, Americans are worried about data privacy and security and want to have a better understanding of how the technology is being used – especially among those ages: 41-65. Those ages: 25-40 are most familiar, and believe AI plays a more significant role in their lives than other age groups, they are also most optimistic about use of the technology.

Methodology: This poll was conducted between November 17-November 22, 2021 among a sample of 2000 Adults. The interviews were conducted online. An oversample of N=200 of was also fielded among those 18-24 – The interviews were conducted online. Results from the full survey have a margin of error of plus or minus 2 percentage points.

Key Findings — AR (Augmented Reality) and VR (Virtual Reality)



1 Americans are less familiar with augmented reality than the other terms tested those ages 25-40 are most familiar.

- Whether Americans know they are using augmented reality or not most (73%) have used some application of the technology before.

2 Virtual reality is the most familiar term to Americans out of the three tested, those age 18-24 are more familiar with the term than other age groups.

- Americans believe that applications of virtual reality will become a part of their everyday lives sooner than other technological advancements – especially when used in video games. However, willingness to use virtual reality in the workplace or in place of social interaction is moderate.

Methodology: This poll was conducted between November 17-November 22, 2021 among a sample of 2000 Adults. The interviews were conducted online. An oversample of N=200 of was also fielded among those 18-24 – The interviews were conducted online. Results from the full survey have a margin of error of plus or minus 2 percentage points.

Key Findings — Sustainability



1

60% of Americans agree that climate change is the biggest threat to humankind, however, most want large organizations to take responsibility and action.

- Millennials (age: 25-40) are more likely to say they actively seek out establishments or environments that have a mission of sustainability. Businesses should keep this in mind when thinking about sustainability efforts and messaging to younger Americans.

2

Millennials are more likely to agree that fossil fuels and fast fashion are major threats to the environment than other groups. They are also more likely to say they are cutting back on meat in their diets for environmental reasons.

Methodology: This poll was conducted between November 17-November 22, 2021 among a sample of 2000 Adults. The interviews were conducted online. An oversample of N=200 of was also fielded among those 18-24 – The interviews were conducted online. Results from the full survey have a margin of error of plus or minus 2 percentage points.

Key Findings — New Paradigm

1

Most Americans have experienced a significant life change as a result of the pandemic – a quarter of Americans have lost a friend, family member, or colleague to COVID-19. Younger Americans are more likely to have started or switched careers, started remote or hybrid schooling, and moved to a new city than older Americans.

2

The impacts of the pandemic have left Americans feeling more health conscious and more reliant on technology than they had been previously.

3

A majority agree that science and technological advancements during the pandemic have changed our work environment forever. Most also state that they would prefer a job where they can work remote versus going into work.

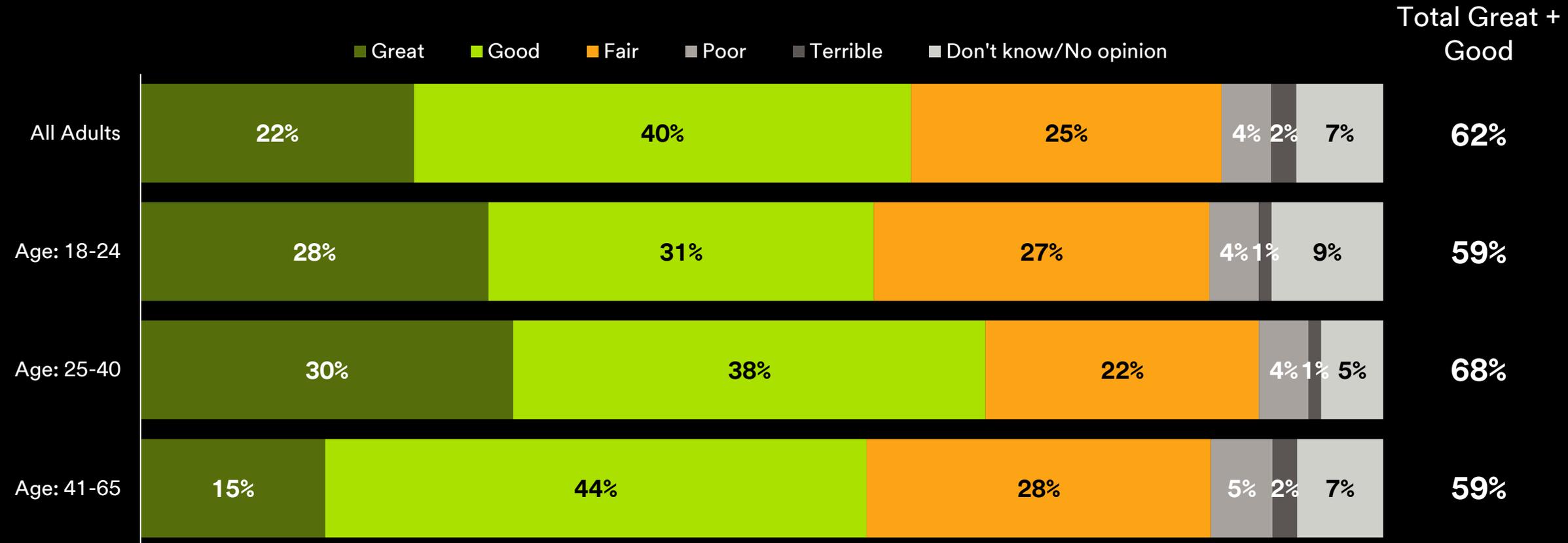
Methodology: This poll was conducted between November 17-November 22, 2021 among a sample of 2000 Adults. The interviews were conducted online. An oversample of N=200 of was also fielded among those 18-24 – The interviews were conducted online. Results from the full survey have a margin of error of plus or minus 2 percentage points.



Science & Technology Perceptions

Most US adults feel the United States is doing good or great on technological access – especially those age 18-40 who are more likely to say the United States is doing great.

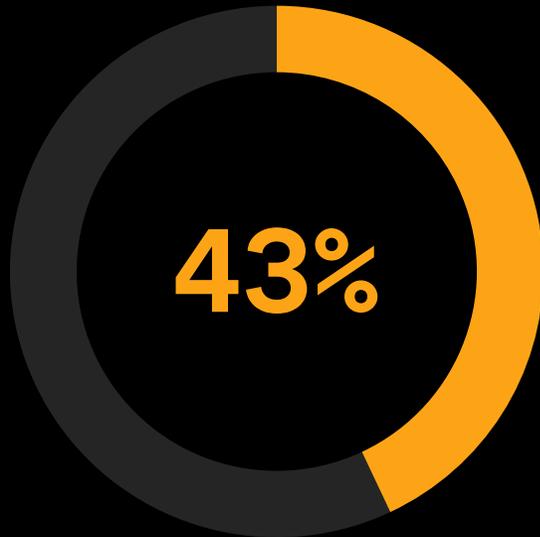
How would you rate United States on technological access for its citizens?



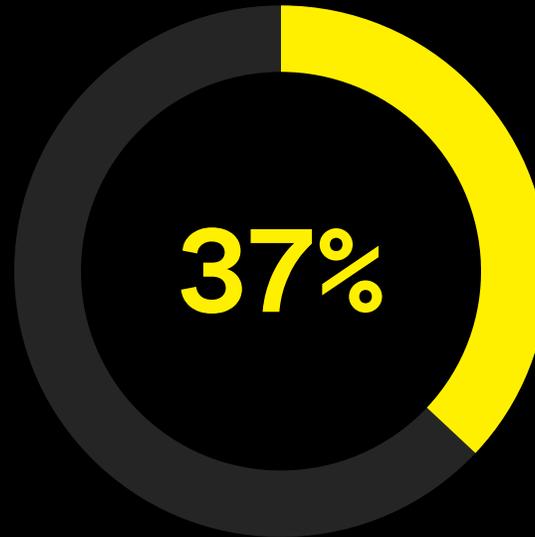
A plurality of Americans think science and technological innovation should focus on finding solutions for environmental and societal problems.

Which of the following statements best aligns with your belief on the primary focus of science and technological innovation? 'Science and technological innovation should...'

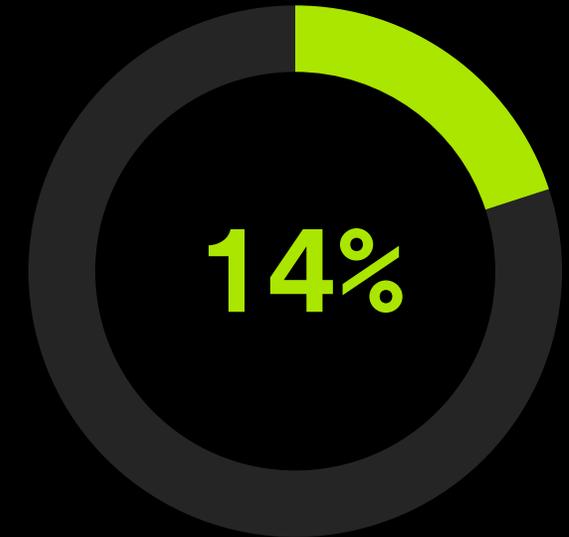
“Find solutions to today’s **environmental and societal problems**, including climate change, sustainability, social injustice, clean water access, homelessness, etc.”



“Protect us from **broader global crises** like future pandemics and public health preparedness, as well as propaganda and technological terrorism, like hacking and data stealing.”



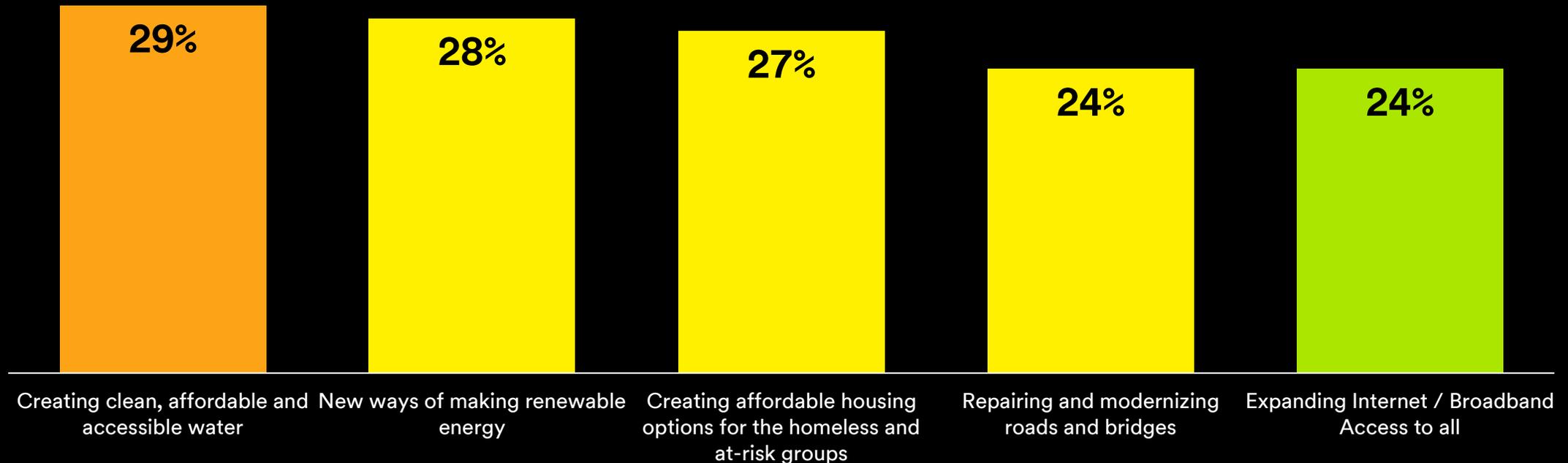
“**Advance the human race to achieve the impossible**, seeing how far we can innovate to create a futuristic and convenient world.”



Americans think clean, affordable, and accessible water is the most important infrastructure development for science and technology to prioritize in the next 5 years

What infrastructure developments do you think are most important for science and technology innovation to prioritize in the next five years? Select up to 3.

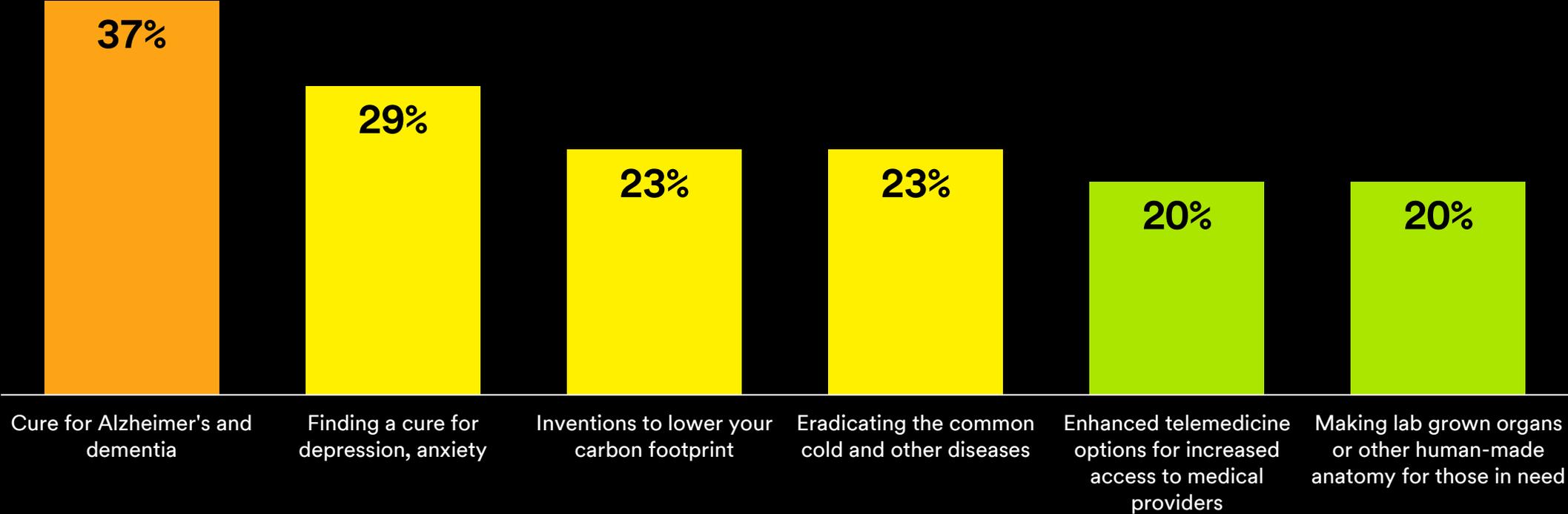
Top 5 selected:



US adults believe a cure for Alzheimer's and dementia is the most important human development that science and technology should prioritize in the next 5 years.

What human developments do you think are most important for science and technology innovation to prioritize in the next five years? Select up to 3.

Top 5 selected:

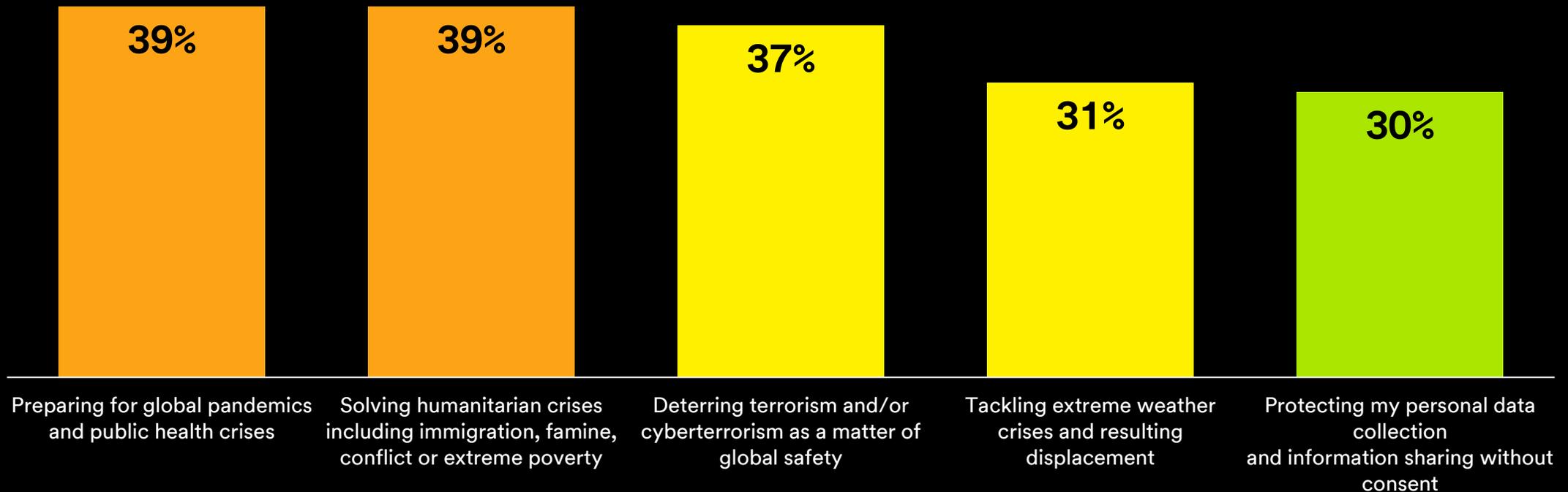


*Enhanced telemedicine options for increased access to medical providers and Making lab grown organs or other human-made anatomy for those in need both included since they have the same % and are tied for the 5th selected response.

Preparing for global pandemics and public health crises, and humanitarian crises are the global crises that Americans feel science and technology should prioritize in the next 5 years.

Which of the following global crises do you think are most important for science and technology innovation to prioritize in the next five years? Select up to 3.

Top 5 selected:



Americans agree that technology should make our lives easier, however, there are concerns about how much we rely on technology in our everyday lives and too much screen time.

How much do you agree or disagree with each of the following statements?

 **70%**

of people agree...

“Diverse groups of people working on today’s problems will lead to greater innovation”

 **67%**

of people agree...

“I think that ‘too much screen time’ is a health issue that should be addressed”

 **66%**

of people agree...

“More progress should be made in technology and science to make our lives easier or more convenient”

 **68%**

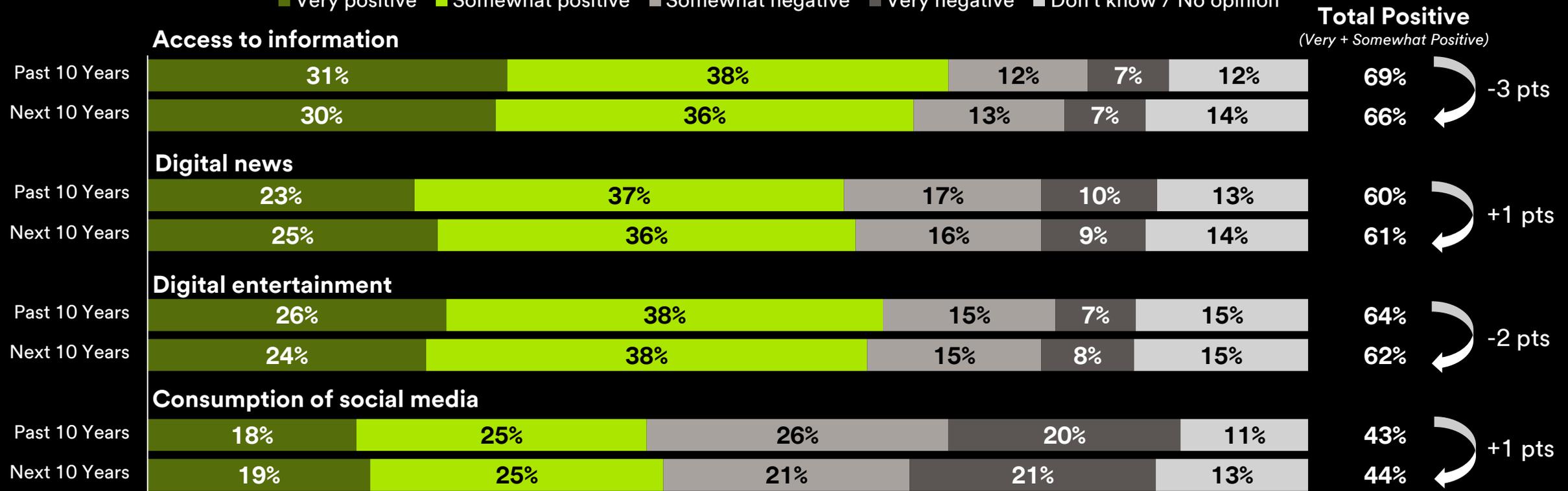
of people agree...

“As a society, we are too dependent on technology in our everyday lives”

Americans expect technological advancements will have a similar impact in the next 10 years as they've had over the past 10 years.

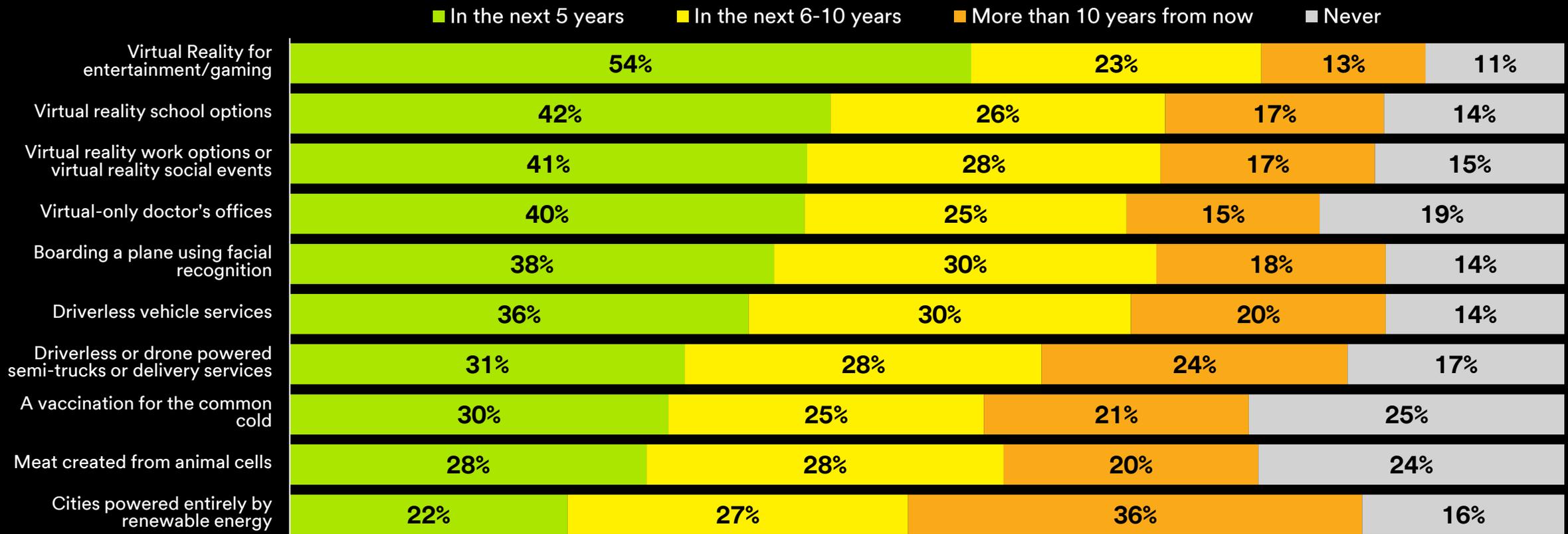
Do you believe that each of the following has had a positive or negative impact on society over the past 10 years/in the next 10 years?

■ Very positive
 ■ Somewhat positive
 ■ Somewhat negative
 ■ Very negative
 ■ Don't know / No opinion



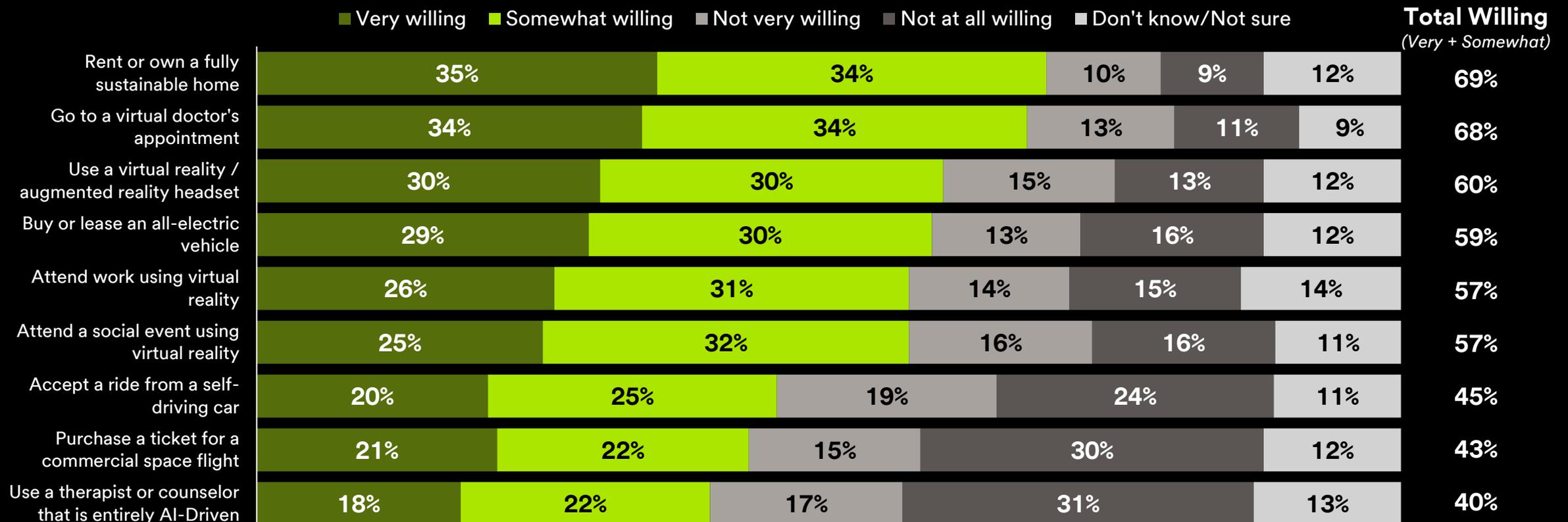
Americans expect that virtual reality will become a normal part of people's everyday lives sooner than other advancements.

When, if ever, do you believe each of the following advancements will become a normal part of people's everyday lives?



Americans are most willing to rent or own a fully sustainable home or go to a virtual doctor's appointment. However, they are less willing to take a commercial space flight or use a therapist that is entirely AI-driven.

How willing are you to try each of the following ?



The image features a dark background with a glowing purple circuit pattern. A large, rounded purple rectangle is positioned in the top-left corner. The text "AI (Artificial Intelligence)" is displayed in a bold, white, sans-serif font, centered horizontally and partially overlapping the purple rectangle and the circuit lines.

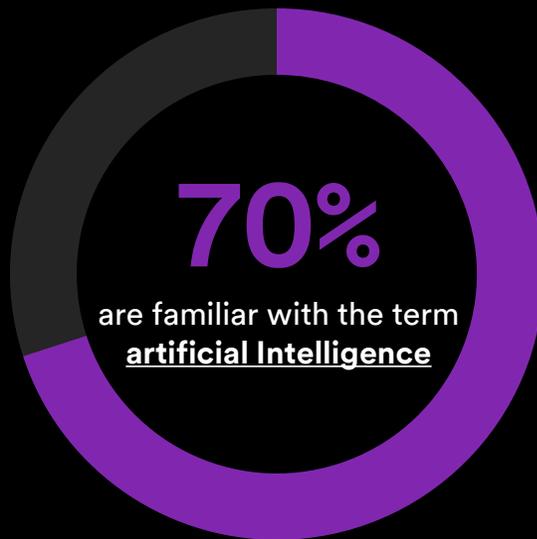
AI (Artificial Intelligence)

Most are familiar with AI and feel that it plays a significant role in their everyday lives. Most also agree the role of AI in their everyday lives will increase in the next 5 years.

How familiar are you with the terms? How big of a role do you believe artificial intelligence plays in your everyday life? In the next 5 years do you expect the role of artificial intelligence in your everyday life to increase, decrease or stay the same?

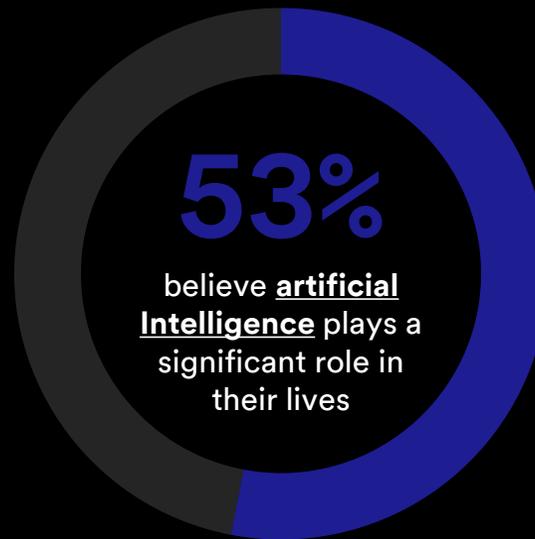
Familiarity:

(Very + Somewhat Familiar)



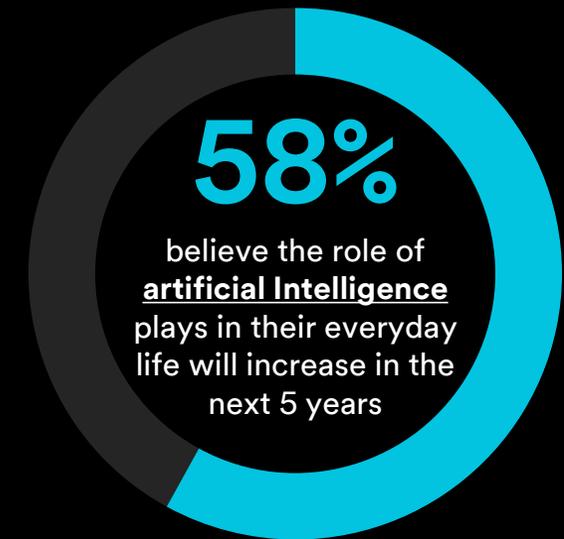
Current Role:

(Very + Somewhat Significant)



Future Role:

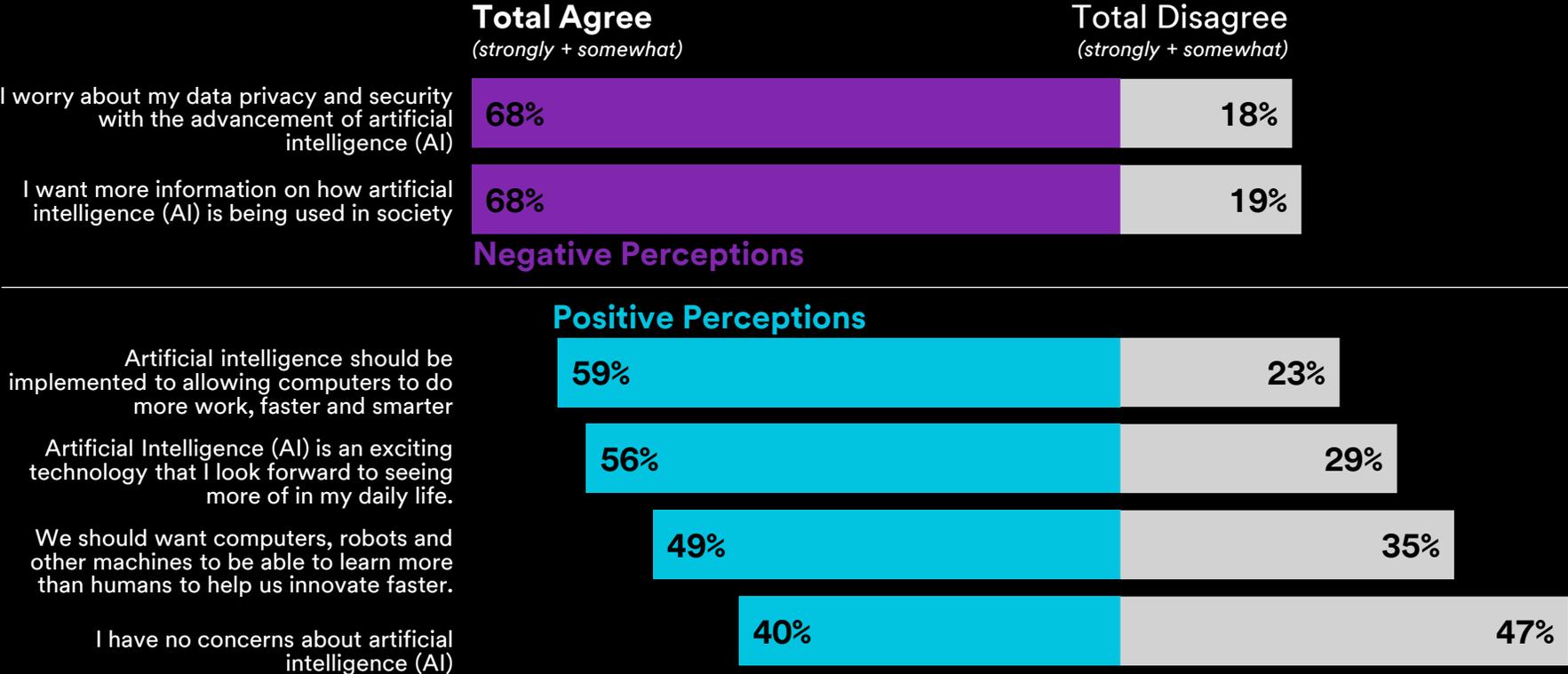
(Increase in the next 5 years)



Those ages 18-40 are more familiar with AI and believe it plays a more significant role in their everyday lives than those 41-65.

Concerns over artificial intelligence slightly outweigh optimism. Americans worry about data privacy and want to understand more about how AI is being used in society.

How much do you agree or disagree with each of the following statements related to artificial intelligence (AI)?

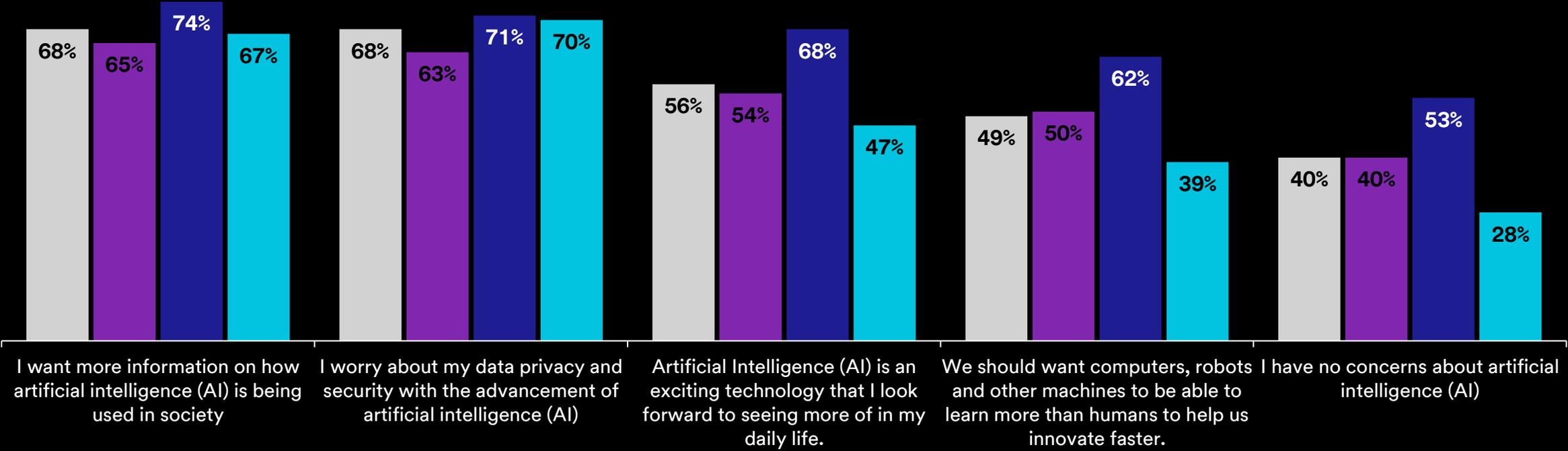


Those age 25-40 are more optimistic and have less concerns about AI than other age groups.

How much do you agree or disagree with each of the following statements related to artificial intelligence (AI)?

Total Agreement (Strongly + Somewhat Agree)

■ Global Average ■ Age: 18-24 ■ Age: 25-40 ■ Age: 41-65





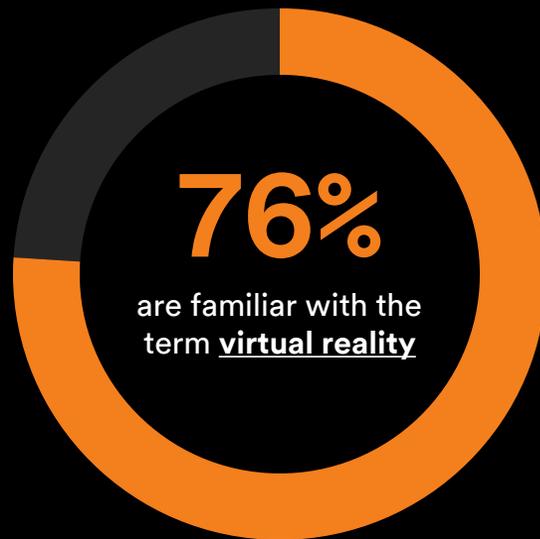
AR & VR **(Augmented Reality** **& Virtual Reality)**

Most are familiar with VR but less than half feel that it plays a significant role in their everyday lives. A majority agree the role of VR in their everyday lives will increase in the next 5 years.

How familiar are you with the terms? How big of a role do you believe virtual reality plays in your everyday life? In the next 5 years do you expect the role of virtual reality in your everyday life to increase, decrease or stay the same?

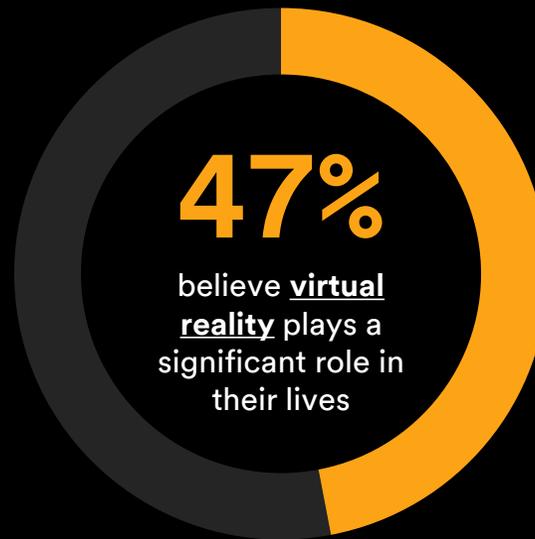
Familiarity:

(Very + Somewhat Familiar)



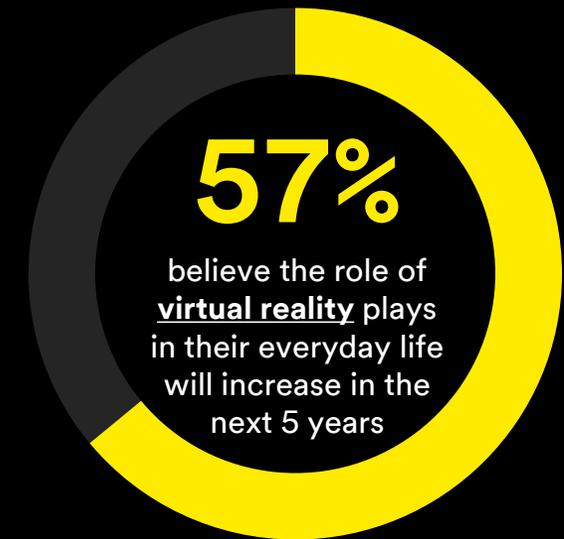
Current Role:

(Very + Somewhat Significant)



Future Role:

(Increase in the next 5 years)



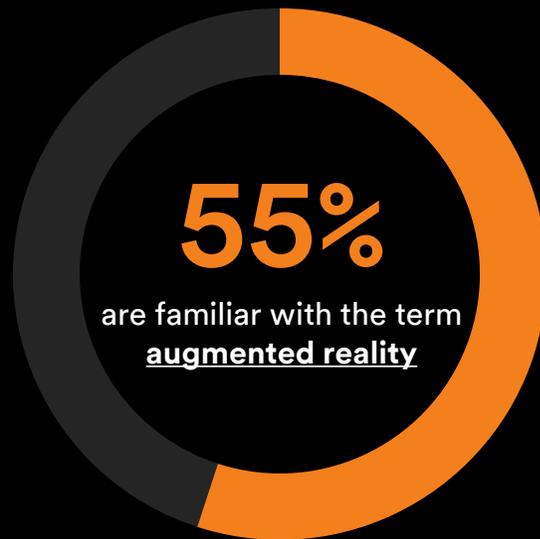
Those ages 18-40 are more familiar with VR and believe it plays a more significant role in their everyday lives than those 41-65.

About half are familiar with AR but fewer feel that it plays a significant role in their everyday lives. A majority agree the role of AR in their everyday lives will increase in the next 5 years.

How familiar are you with the terms? How big of a role do you believe augmented reality plays in your everyday life? In the next 5 years do you expect the role of augmented reality in your everyday life to increase, decrease or stay the same?

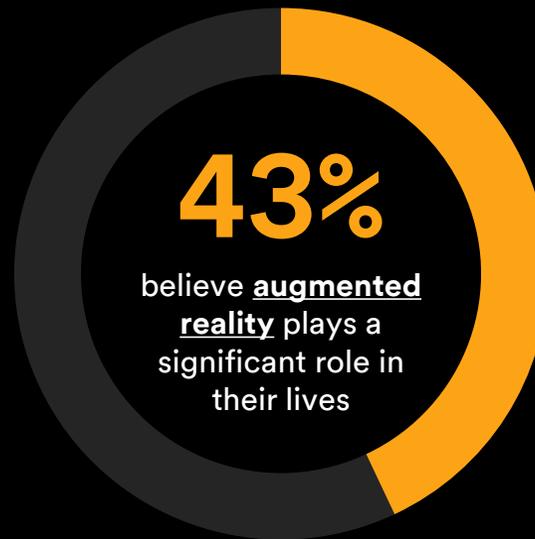
Familiarity:

(Very + Somewhat Familiar)



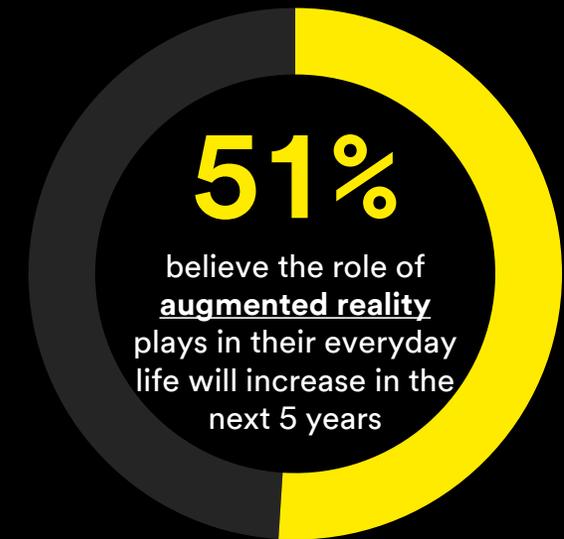
Current Role:

(Very + Somewhat Significant)



Future Role:

(Increase in the next 5 years)

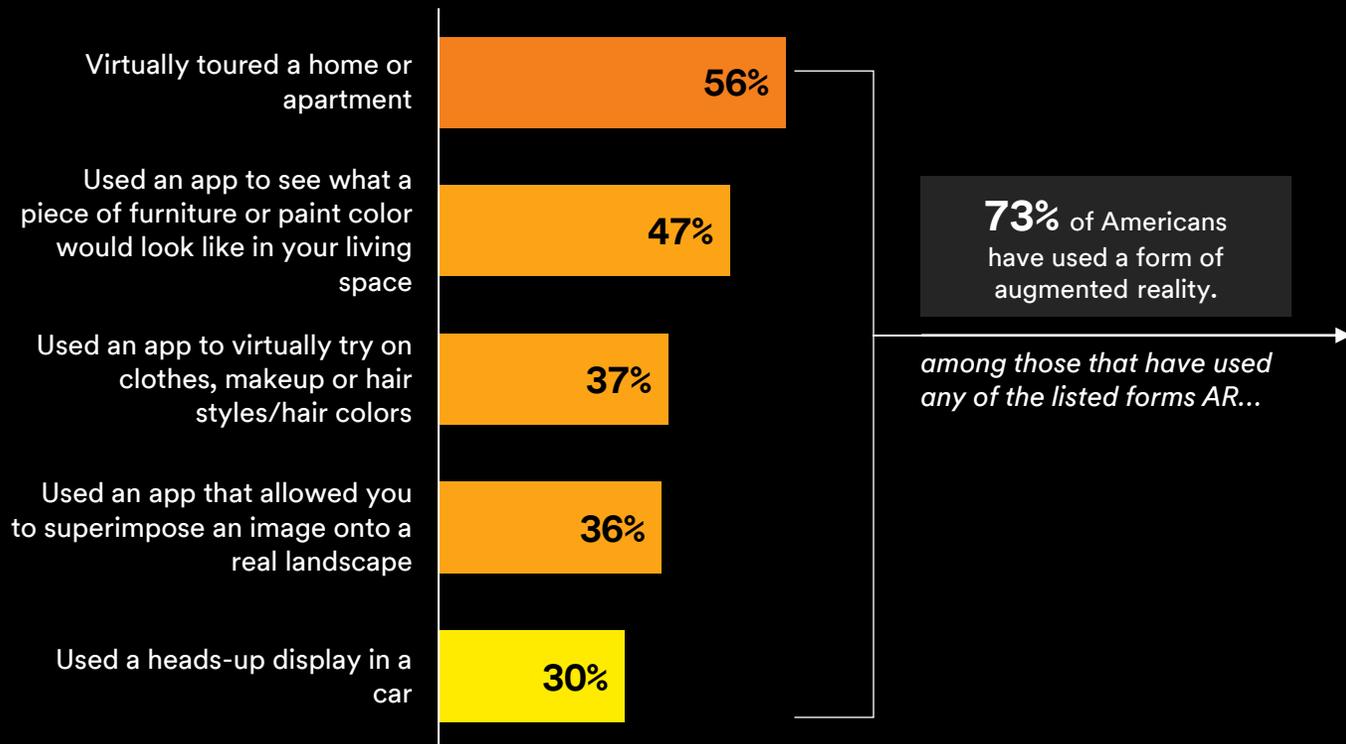


Those ages 18-40 are more familiar with AR and believe it plays a more significant role in their everyday lives than those 41-65.

Those who have used augmented reality before are more familiar with the term and feel it plays a more significant role in their lives compared to all respondents.

Have you ever ...? How familiar are you with the terms? How big of a role do you believe augmented reality plays in your everyday life? In the next 5 years do you expect the role of augmented reality in your everyday life to increase, decrease or stay the same?

% Have done each of the following:



Familiarity with AR

63% Total Familiar

(Very + Somewhat)

+8 vs. All Adults ▲

Current Role of AR

51% Total Significant Role

(Very + Somewhat)

+8 vs. All Adults ▲

Future Role of AR

60% Expect an Increased Role

+9 vs. All Adults ▲

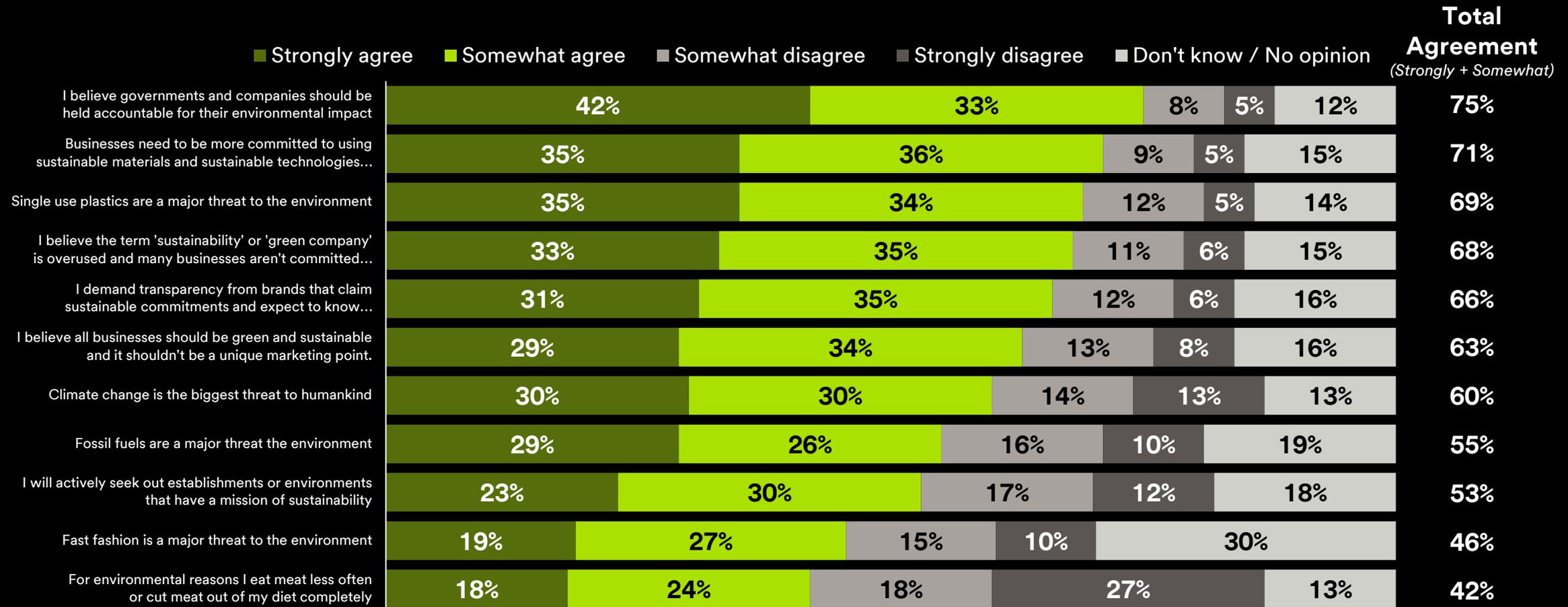
▲ Indicates positive movement outside of the MOE

The image features a black background with several overlapping, stylized green leaves on the left side. The leaves are rendered in a dark green color with a slight gradient and are arranged in a fan-like pattern. The word "Sustainability" is written in a bold, white, sans-serif font across the middle of the image, partially overlapping the leaves.

Sustainability

Americans are more likely to agree that governments and businesses should bear most of the responsibility for sustainability efforts.

How much do you agree or disagree with each of the following statements?



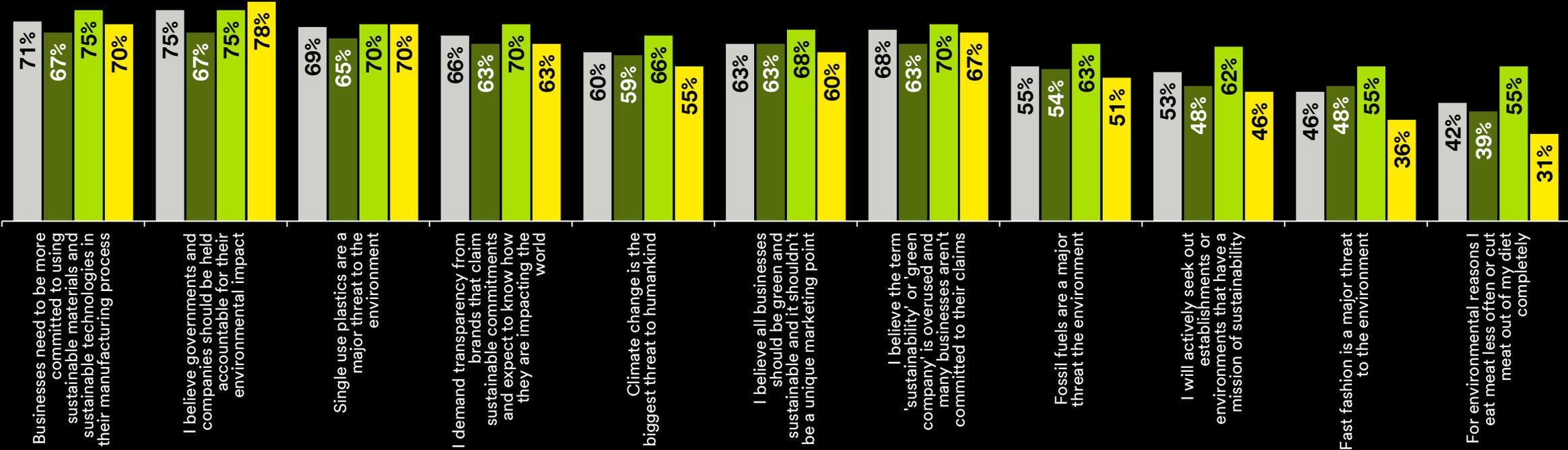
Those age 25-40 agree more that climate change is the biggest threat to humankind than other age groups and are more likely to hold businesses accountable for sustainability efforts than other age groups.

How much do you agree or disagree with each of the following statements?

Total Agreement

(Strongly + Somewhat Agree)

■ Global Average ■ Age: 18-24 ■ Age: 25-40 ■ Age: 41-65

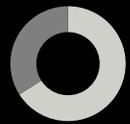




New Paradigm

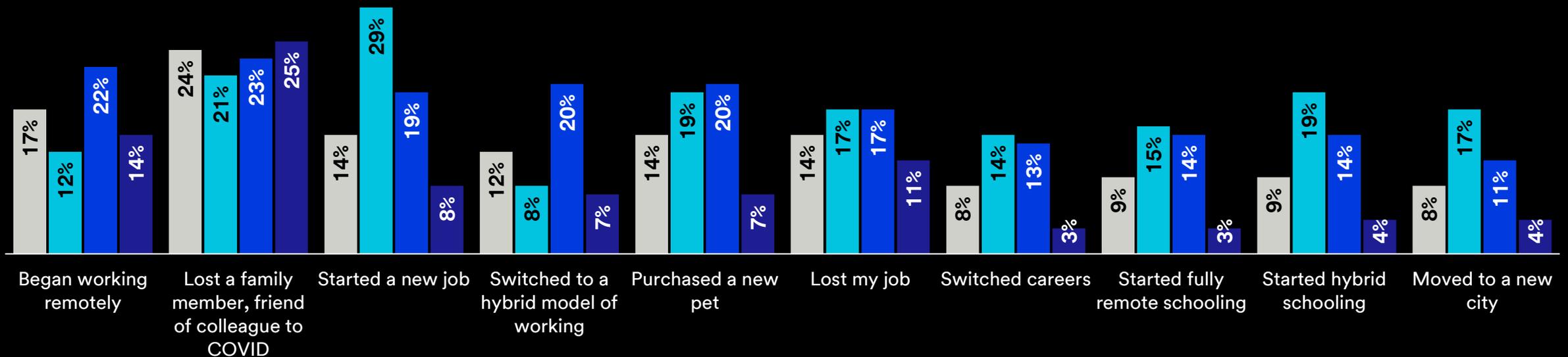
Most have experienced a significant life change as a result of the pandemic. Those age 18-24 are much more likely to have started a new job compared to the rest of Americans.

As a result of the pandemic, have you experienced any of the following?



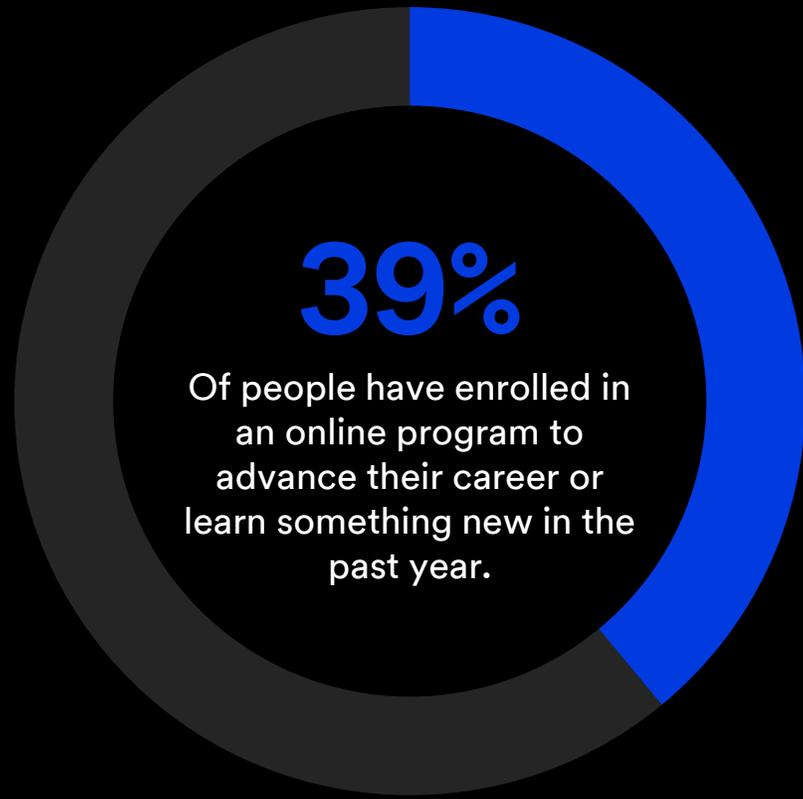
66% Of people have experienced a significant life change as a result of the pandemic

■ Global Average ■ Age: 18-24 ■ Age: 25-40 ■ Age: 41-65



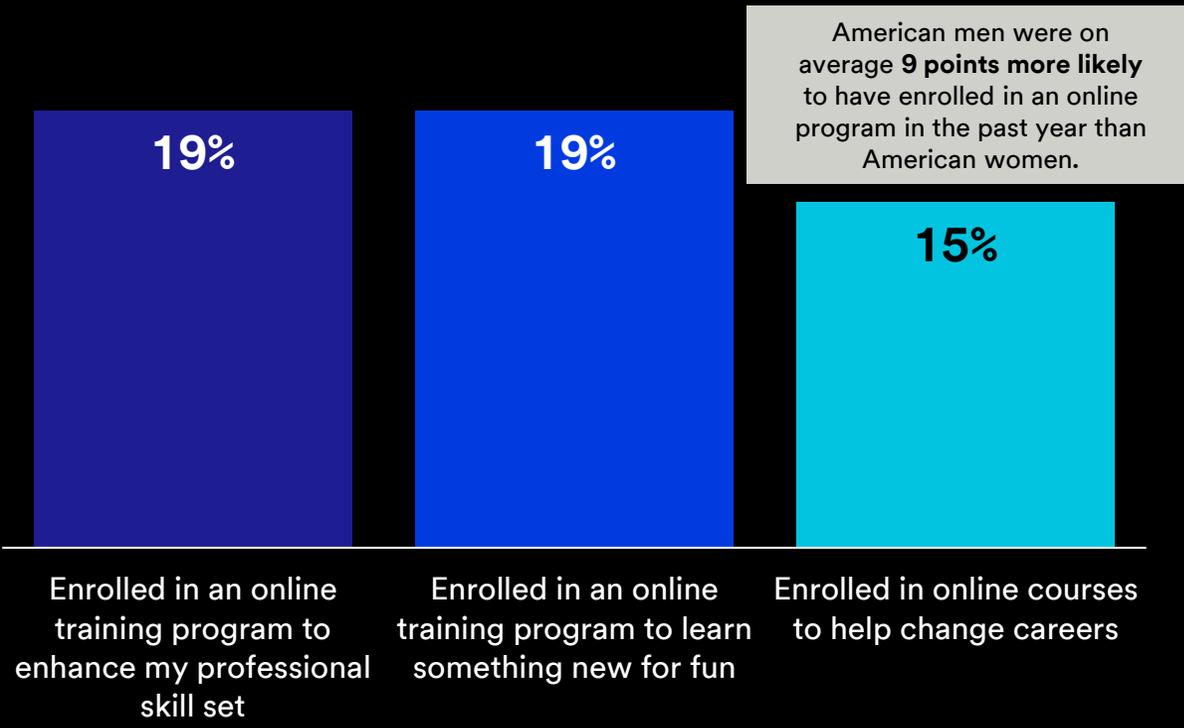
In the past year, over one-third of Americans have enrolled in an online training program.

In the past year have you done any of the following?



What did they enroll in?

(among all respondents)

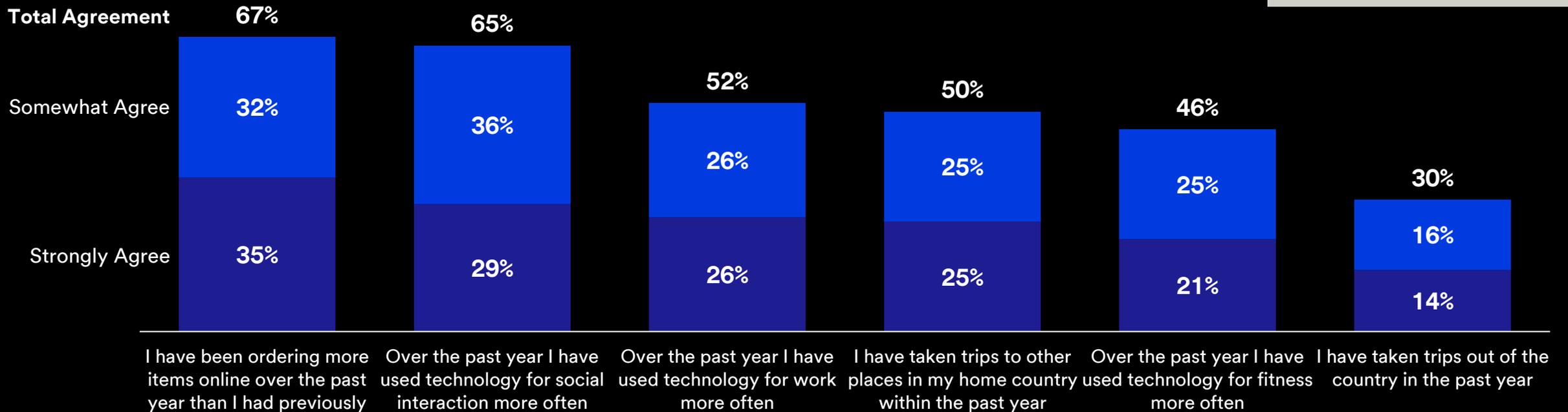


American men were on average **9 points more likely** to have enrolled in an online program in the past year than American women.

Americans have been ordering more online and using technology for social interaction more often this year than they were previously.

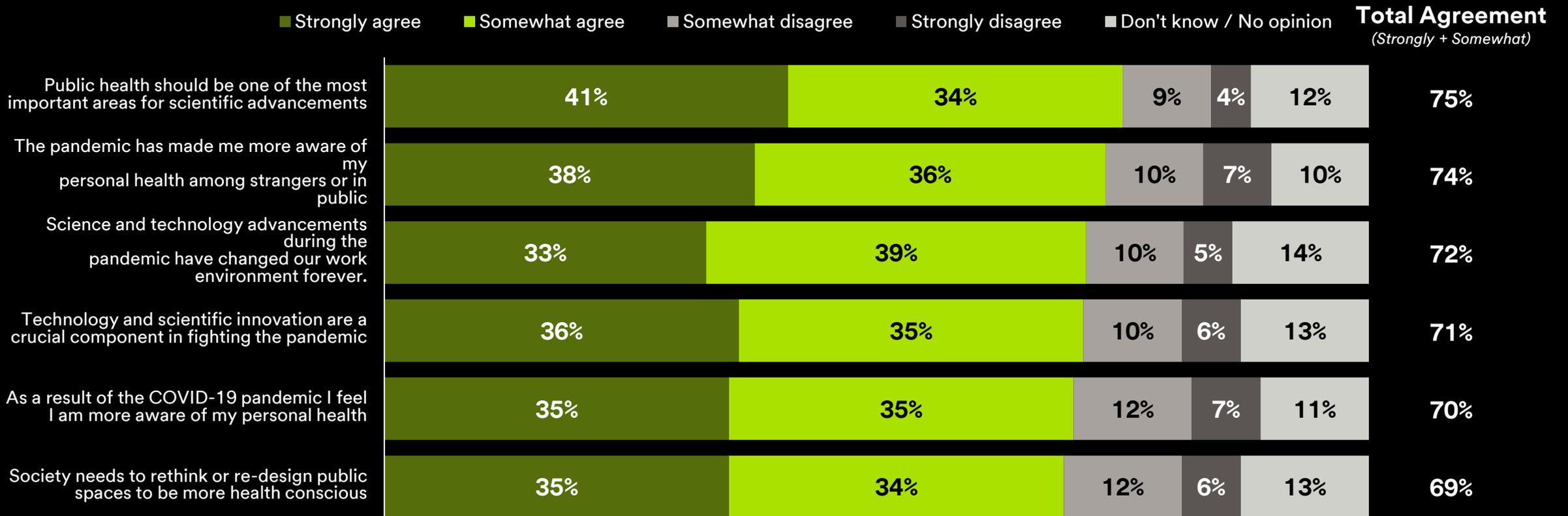
How much do you agree or disagree with each of the following statements?

Those ages: 25-40 are more likely to have used technology for social interaction, for fitness, for work more often than other age groups. They are also more likely to have ordered more items online over the past year.



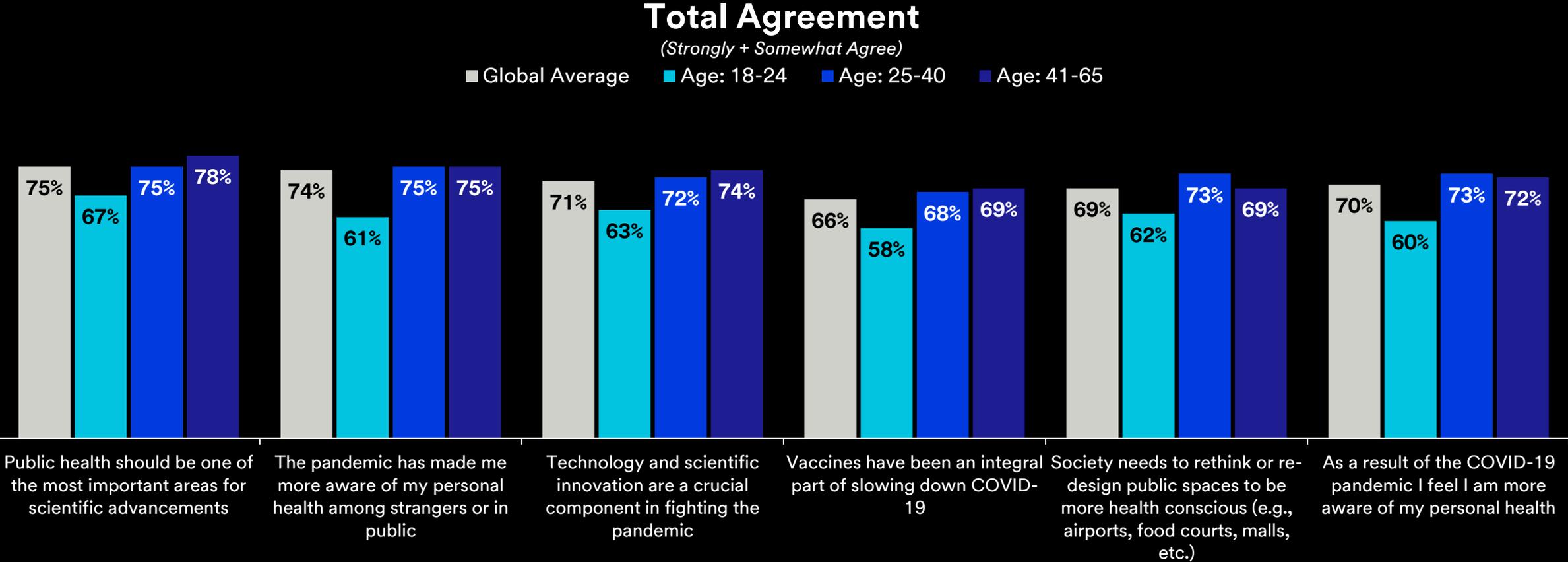
A majority agree that the pandemic has impacted how they feel about science and technology related to public health.

How much do you agree or disagree with each of the following statements?



Those age 25-65 agree more strongly that the pandemic has impacted how they view public health and the role of science and technology related to public health more than those age 18-24.

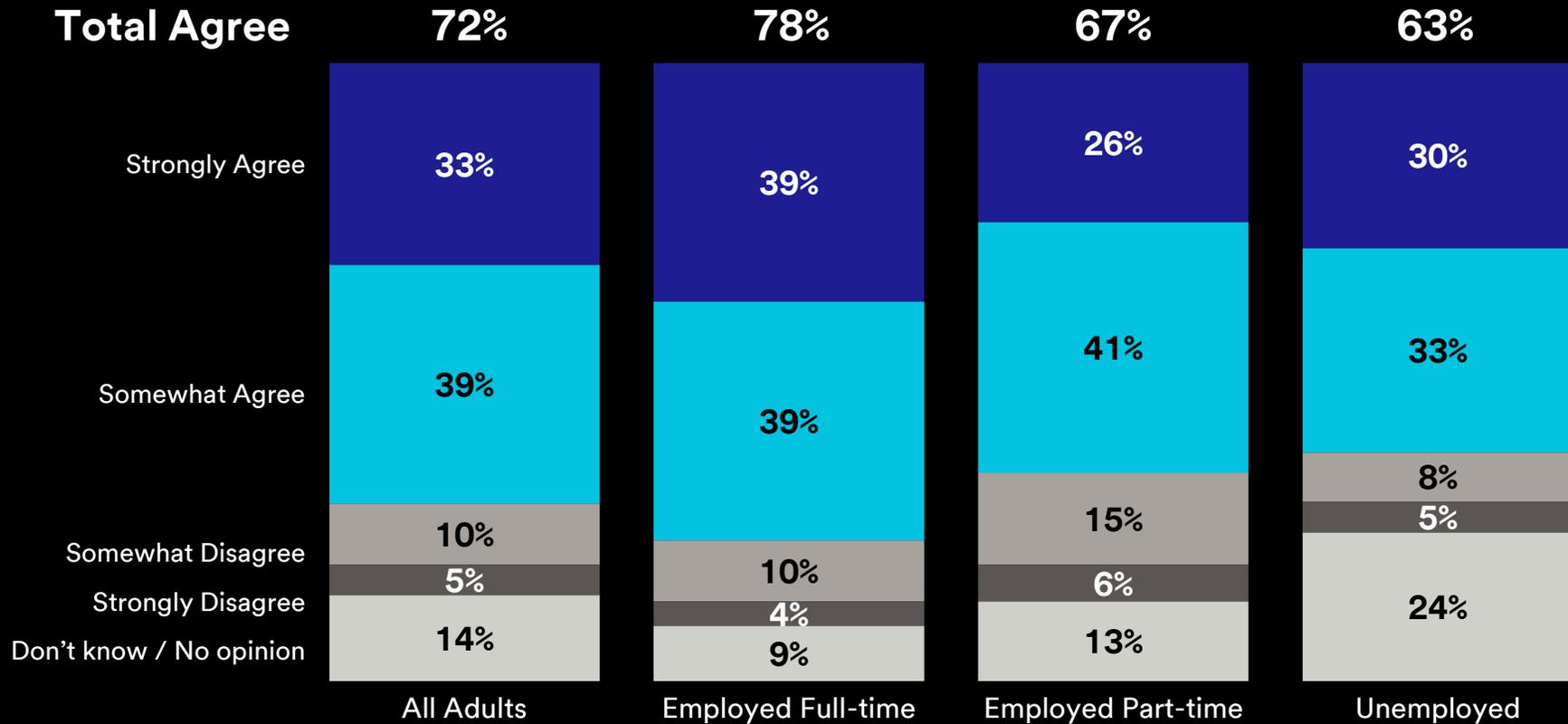
How much do you agree or disagree with each of the following statements?



Adults feel that science and technology during the pandemic has changed the work environment forever – especially those employed full-time.

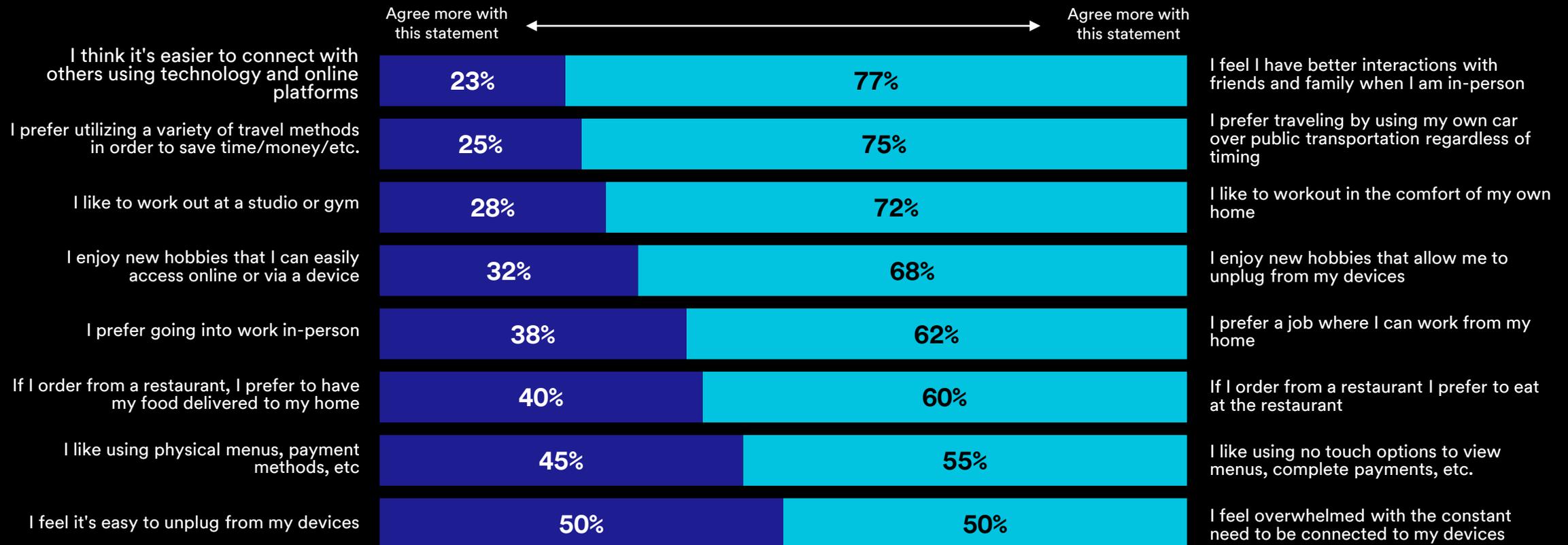
How much do you agree or disagree with each of the following statements?

“Science and technology advancements during the pandemic have changed our work environment forever.”



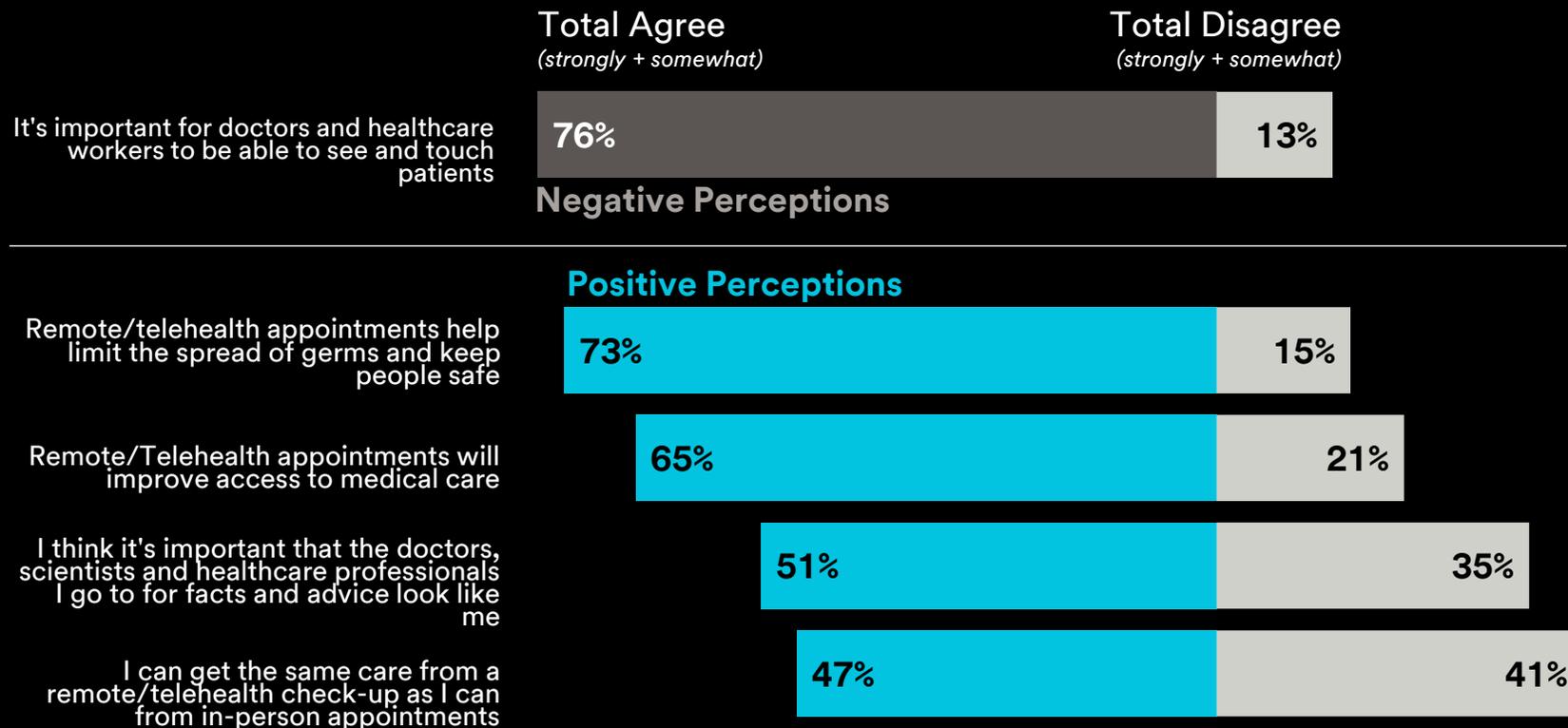
Americans feel that they enjoy in-person interaction and activities more than virtual ones, however most would prefer to work and work out at home.

Which of the following statements align more with how you currently feel?
among those who chose one statement over the other



Americans are split on how they feel about remote/telehealth with many agreeing that telehealth improves access and can keep people safe, but many also agreeing that it's important for doctors to see and touch patients.

How much do you agree or disagree with each of the following statements?



among those that have used telemedicine:

84% agreement "Remote/telehealth appointments help limit the spread of germs and keep people safe"
+11 vs. All Adults ▲

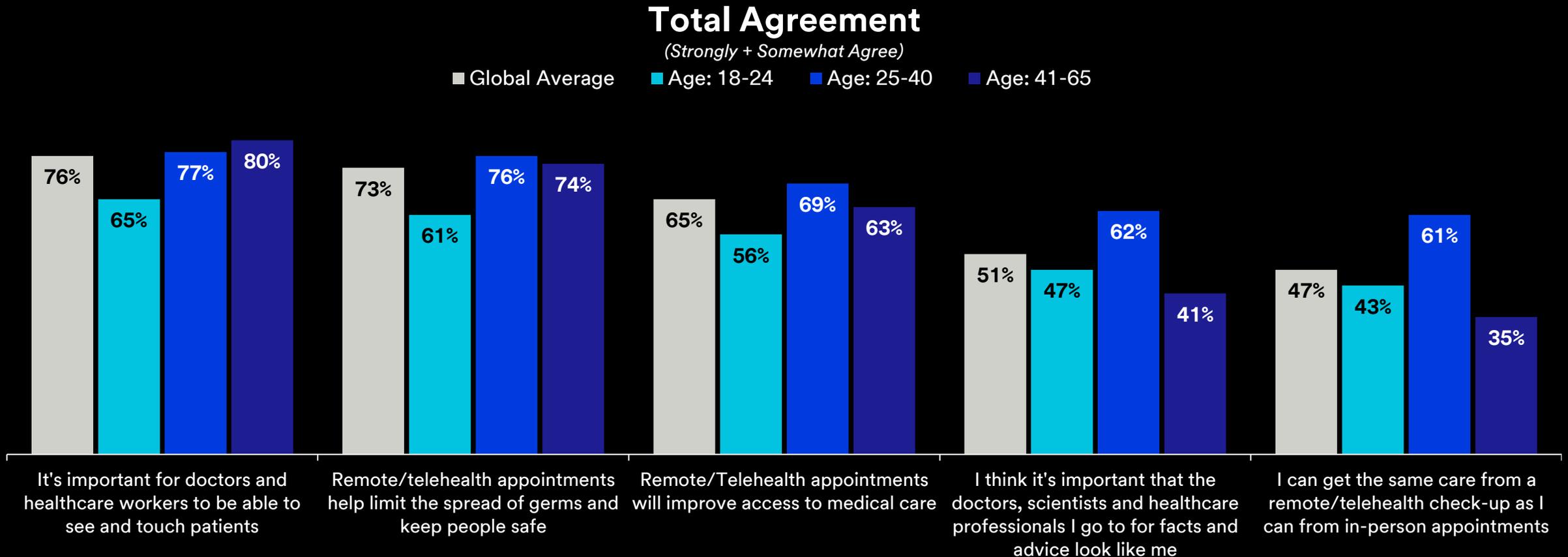
76% agreement "Remote/Telehealth appointments will improve access to medical care"
+11 vs. All Adults ▲

58% agreement "I can get the same care from a remote/telehealth check-up as I can from in-person appointments"
+11 vs. All Adults ▲

▲ Indicates positive movement outside of the MOE

Older Americans (age 41-65) feel more strongly that it's important for doctors and patients to interact in person, while those age 25-40 agree more that they can get the same healthcare from telehealth check-ups as they can from in-person appointments.

How much do you agree or disagree with each of the following statements?





Thank you