



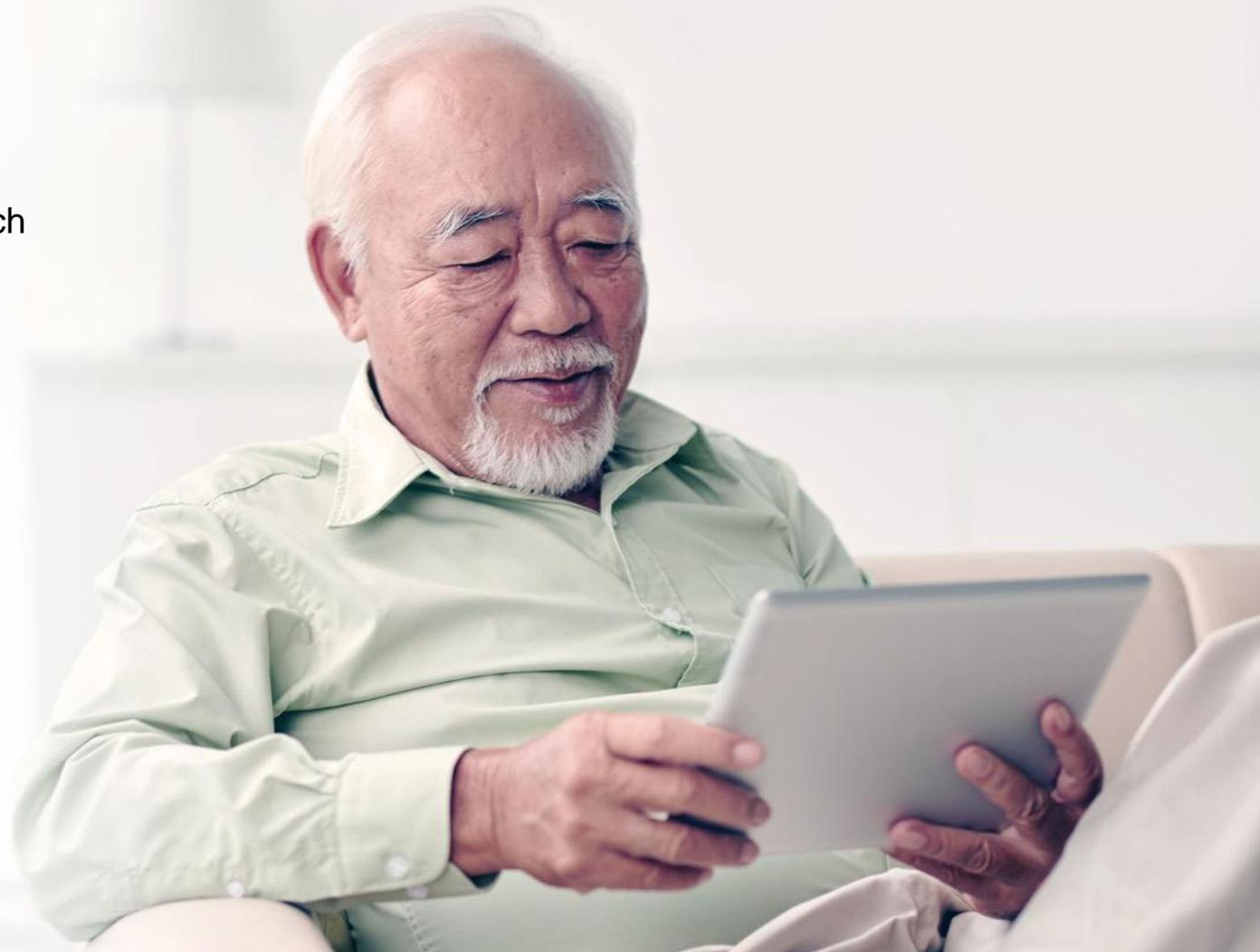
2021 TECH TRENDS AND THE 50-PLUS

Top 10 Biggest Trends

April 2021

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Executive Summary

1. In 2020, a year when a global pandemic significantly limited social interaction, technology became more important than ever — for everyone.

- More than four in 10 (44%) now have a more positive feeling about using technology to connect than they did before COVID-19.
- Four in five (82%) rely on technology to stay connected and in touch with family and friends.
- Using technology to connect with others across multiple forms of communication has increased since the onset of the pandemic. Many say they are using video chats (45%), texting (37%), emailing (26%), and phone (29%) more now than before the pandemic.

2. Video-chat is here to stay.

- In 2019, less than half of adults age 50-plus ever used video chat. In 2020, 70% have used it, with one in three using video chat weekly.
- Most video chat from their smartphone (52%) although some use a computer (24%) or tablet (28%).

3. The dependency on tech has created new social behaviors, although it's too soon to tell what will stick around.

- While one in three are not familiar with spontaneous social media livestreams, an equal amount are currently using or are interested in social media livestreams.
- One in three (32%) have attended a planned, live, virtual event such as an exercise class since the onset of COVID-19.
- The type of event is the key deciding factor for engagement with live, virtual events. Other factors in order of importance are cost, host, and time. Few consider the event platform.

Executive Summary

4. Older adults are doing more with their smartphones, by development over time or necessity, and using them more frequently.

- Overall, there was significant growth in the use of technology to keep the house running smoothly during the pandemic. More are shopping/making purchases and conducting banking and financial transactions with a smartphone than before the pandemic.
- Ordering groceries via smartphone is up dramatically from 6% to 24%.
- There was a significant increase (up from 28% to 40% YOY) in the use of smartphones to communicate with medical professionals for telehealth visits, ordering prescriptions, receiving personal medical advice, or making appointments.

5. 2020 is the year older adults adopted, updated, and modernized their tech, and many spent big bucks to do so.

- Tech spending increased exponentially (adults 50-plus spending is up 194 percent from \$394 to \$1144) to modernize, update, or create a better experience online.
- Year over year increases in ownership is seen for all devices tracked (smartphone, tablet, home assistant, wearables, smart home technology).

6. Smart TV's were the second-most popular tech purchase.

- Smartphones, smart TV and earbuds/Bluetooth headsets are the top three tech purchases.
- Smart TV ownership experienced a massive double-digit year-over-year growth among those 50-plus from 49% in 2019 to 64% in 2020.

7. 2020 brought a dramatic shift in how adults 50-plus consume entertainment. Growth in streaming was huge, but cable tv is still important (for now).

- Streaming increased overall, with only 38% saying they primarily watch network/cable TV compared to 58% in 2019. But older adults are more likely to be blenders and optimizers than cord cutters: 36% watch a mix of network and streaming content, up from 25% in 2019.
- Use of streaming services such as Netflix or Hulu is up from 42% to 60%. 58% stream entertainment weekly (up from 44%) with three in 10 streaming DAILY (up from 18% to 30%).

Executive Summary

8. Some barriers to technology adoption and use still exist for older adults.

- Half want to learn more about using tech (54%) and two in five (39%) say they would use technology more often if they knew how.
- Those who want to learn more are open to learning more about tech from trusted others, social media/online tutorials, or just playing with it.
- The top self-reported barriers to adopting new technology are cost, lack of knowledge, and privacy concerns.

9. Privacy is an important but misunderstood issue for many.

- Most are not confident what they do online remains private (83%).
- Few see the value exchange in sharing personal data for personalization beyond quick financial gains such as cash rewards.
- Less than 50% understand the small print when it comes to privacy policies, likely causing even more hesitation.

10. Disparities related to access have a significant impact on technology adoption and use among older adults.

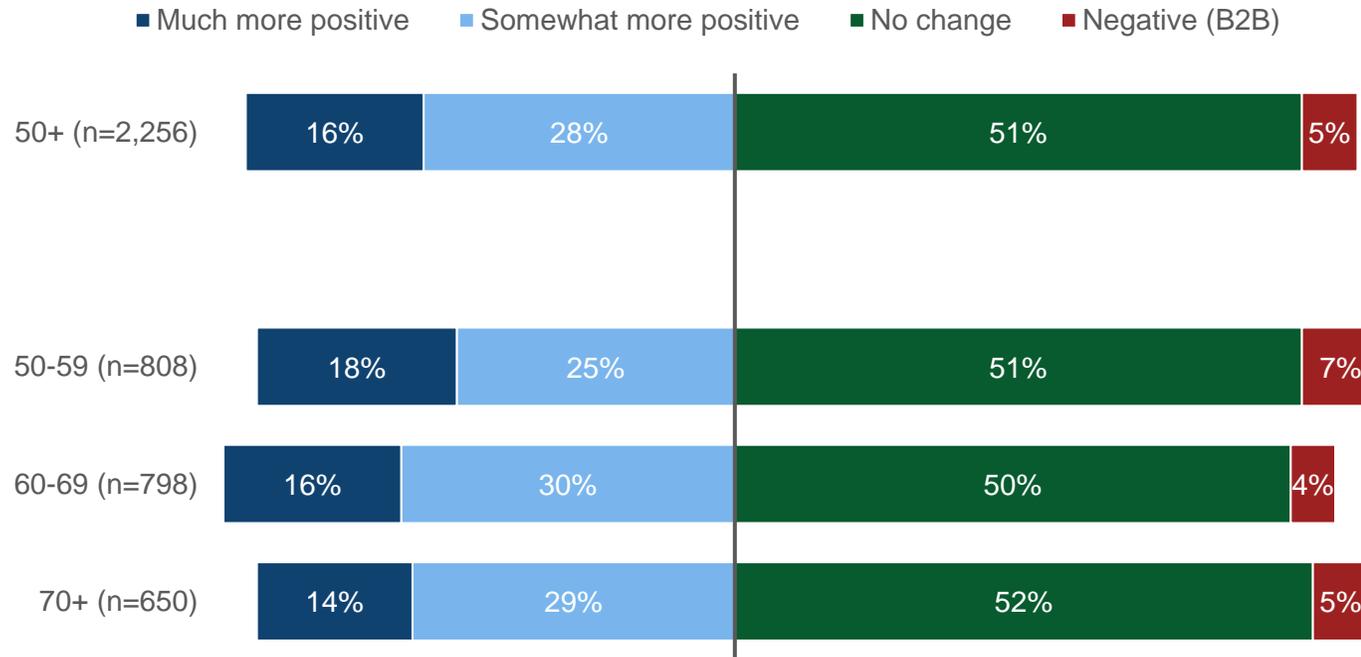
- Sixty percent of adults 50-plus say the cost of high-speed internet is a problem for them personally.
- On average older adults spend \$269 a month (16% of their budget) on tech expenses such as internet, cellphone, cable, and streaming services (average estimated monthly costs: internet, \$68; cellphone, \$103; cable, \$78; and streaming services, \$20).
- A quarter (23%) of rural customers acknowledge that access to high-speed internet is a major problem for their community.
- And while older, urban customers have ample access to high-speed internet such as cable and fiber, they, like rural customers, indicate that cost is a major problem (23% and 26%, respectively).
- Fifteen percent do not have any type of internet or are not sure if they have it.



**TECH TO CONNECT & THE
IMPACT OF COVID-19**

Forty-four percent (44%) view tech far more positively as a way to connect than they did before COVID-19: The feeling is equal across age bands.

Change in attitude towards using technology to connect
Attitude now versus before COVID-19



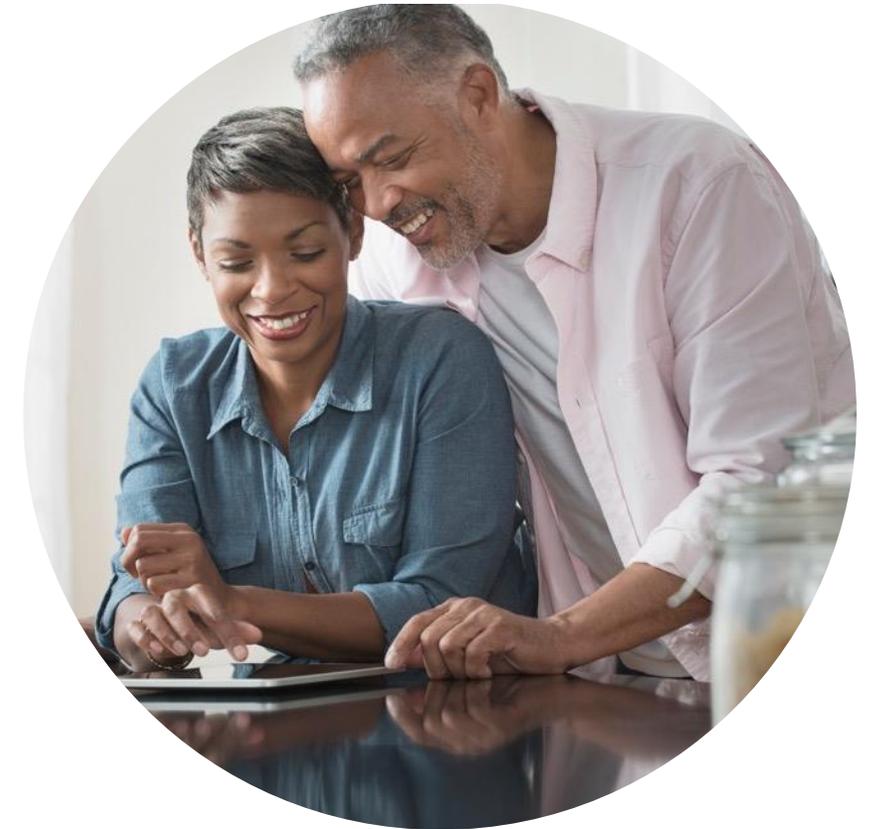
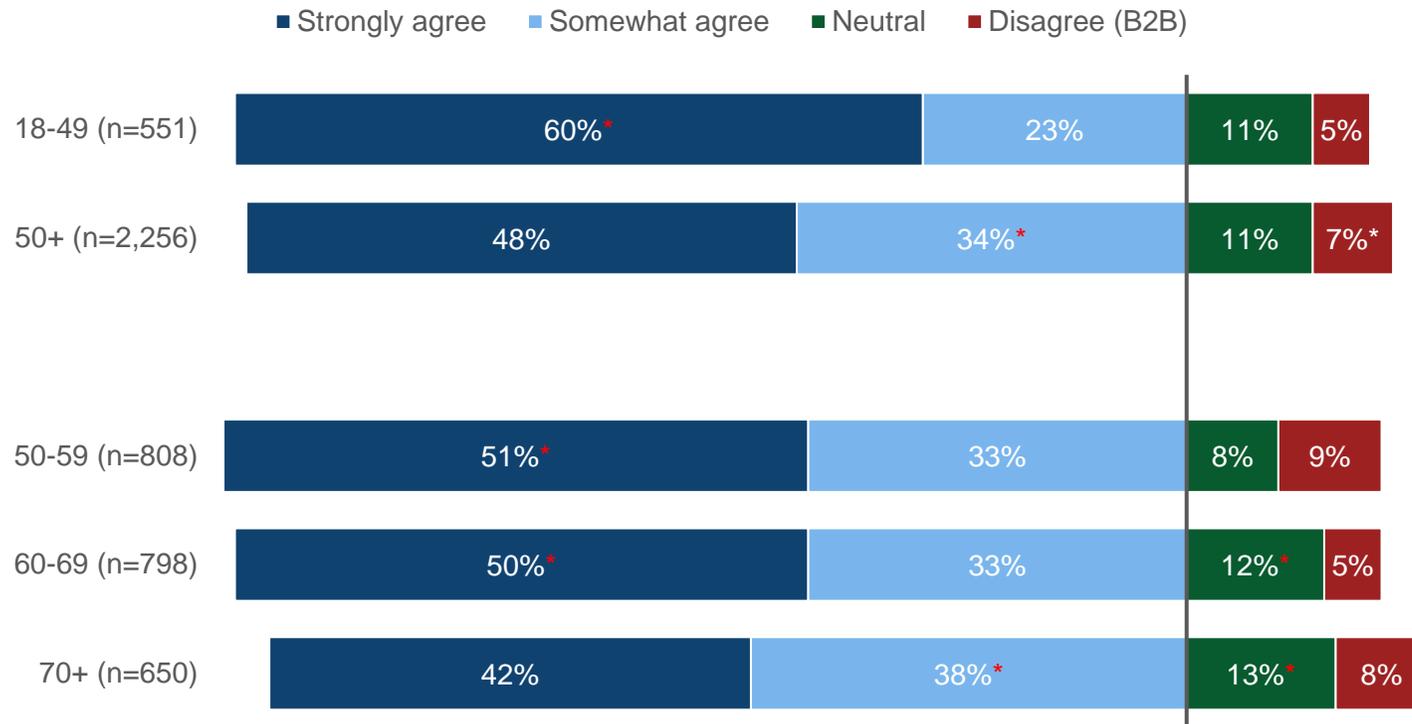
Base: Total 50-plus Respondents

Q19. To what extent have your feelings about using technology to connect with others changed during COVID-19? Would you say your feelings now are...?

* Indicates a significant difference at a 95% confidence level

Regardless of age, the majority of adults agree that they rely on technology to stay connected and in touch with family and friends (83% 18–49; 82%, 50-plus).

I rely on technology to stay connected and in touch with friends and family



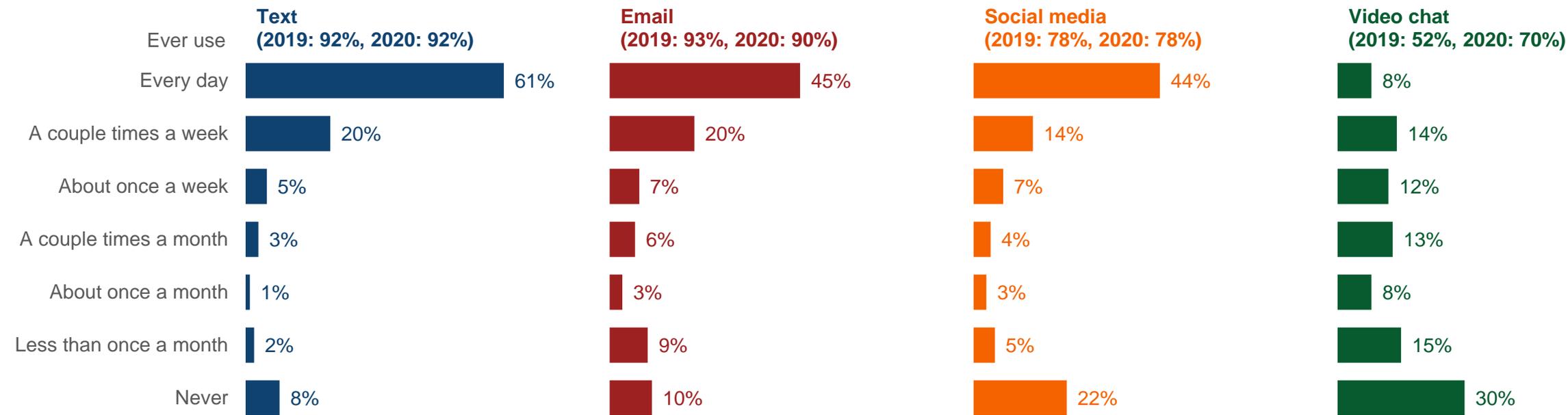
Base: Total Respondents

Q11. Please rate how much you agree or disagree with the following statement.

* Indicates a significant difference at a 95% confidence level

Older adults use a variety of technologies to stay connected to loved ones, with many doing so on a daily basis. Seven in ten now use video chat across multiple devices compared to almost half (48%) who had never used video chat in 2019.

Frequency of using the following methods to connect
Among the 50+

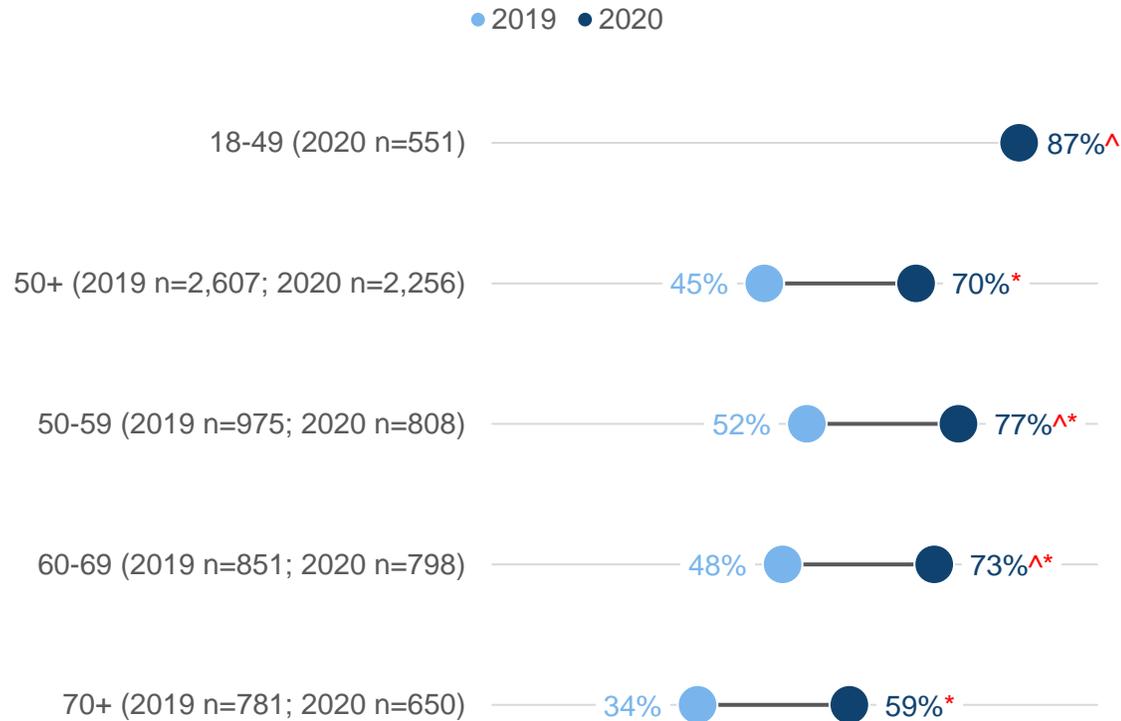


Base: Total 50-plus Respondents (n=2,256)

Q12. How often do you use each of the following to communicate with and stay connected to friends and family?

Older adults have adopted video chat.

Percent who use video chat with friends or family



Video chat purpose by device used

	18-49	50+	50-59	60-69	70+
Desktop/Laptop	492	1,952	715	695	542
With friends or family	37% [*]	24%	24%	27%	22%
For healthcare services	29%	29%	28%	30%	30%
Tablet	336	1,277	490	457	330
With friends or family	31%	28%	25%	29%	31%
For healthcare services	18%	18%	19%	17%	18%
Smartphone	521	1,924	741	687	496
With friends or family	75% [*]	52%	60% [*]	53% [*]	41%
For healthcare services	48% [*]	40%	41%	42%	37%

Q4. For each device listed below, please indicate the activities that you have used it for in the past 3 months? [Healthcare]

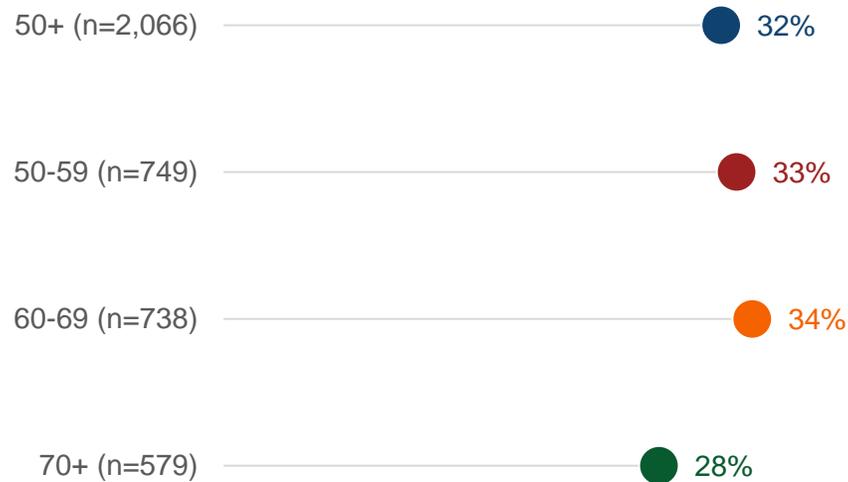
Q12. How often do you use each of the following to communicate with and stay connected to friends and family? [Friends & Family]

[^] Indicates a significant difference between groups at the 95% confidence level

^{*} Indicates a significant difference between years at a 95% confidence level

One-third of those 50-plus have attended a virtual event since the onset of COVID-19. The deciding factor for attendance is the type of event, closely followed by cost, host, and time. Few consider the event platform.

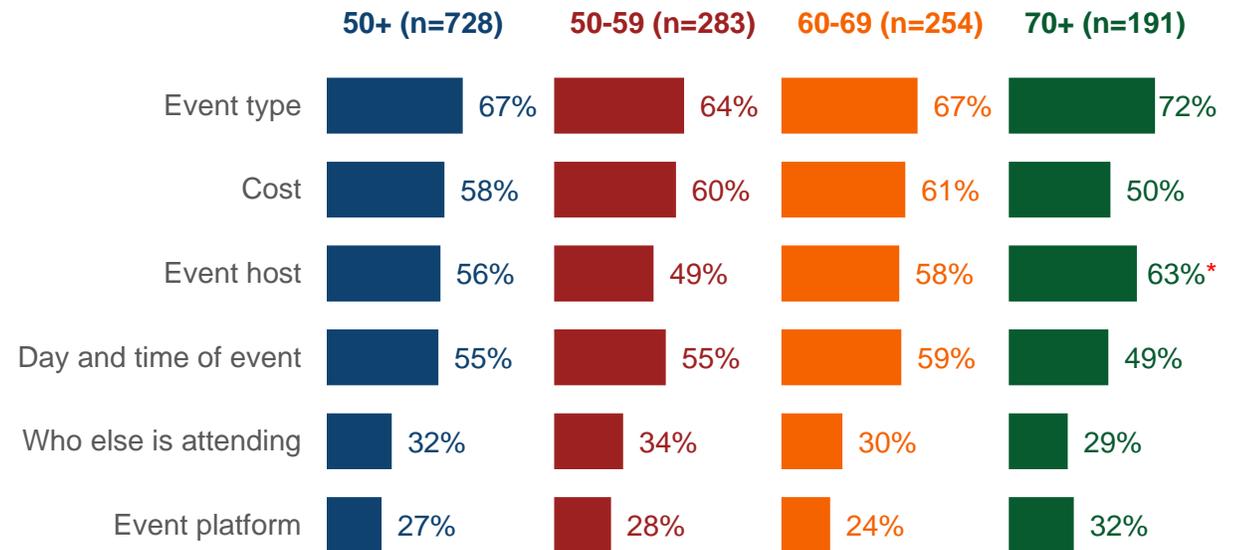
Attended a live virtual event
Since the onset of COVID-19



Base: 50-plus Respondents Aware of Virtual Events (n=2,066)

Q15. Since the onset of COVID-19, have you participated in any live virtual events meant for your enjoyment and to connect you with others?

Top factors in attendance decision
Ranked 1/2/3



* Indicates a significant difference at a 95% confidence level

Base: 50-plus Respondents Have Attended a Live Virtual Event

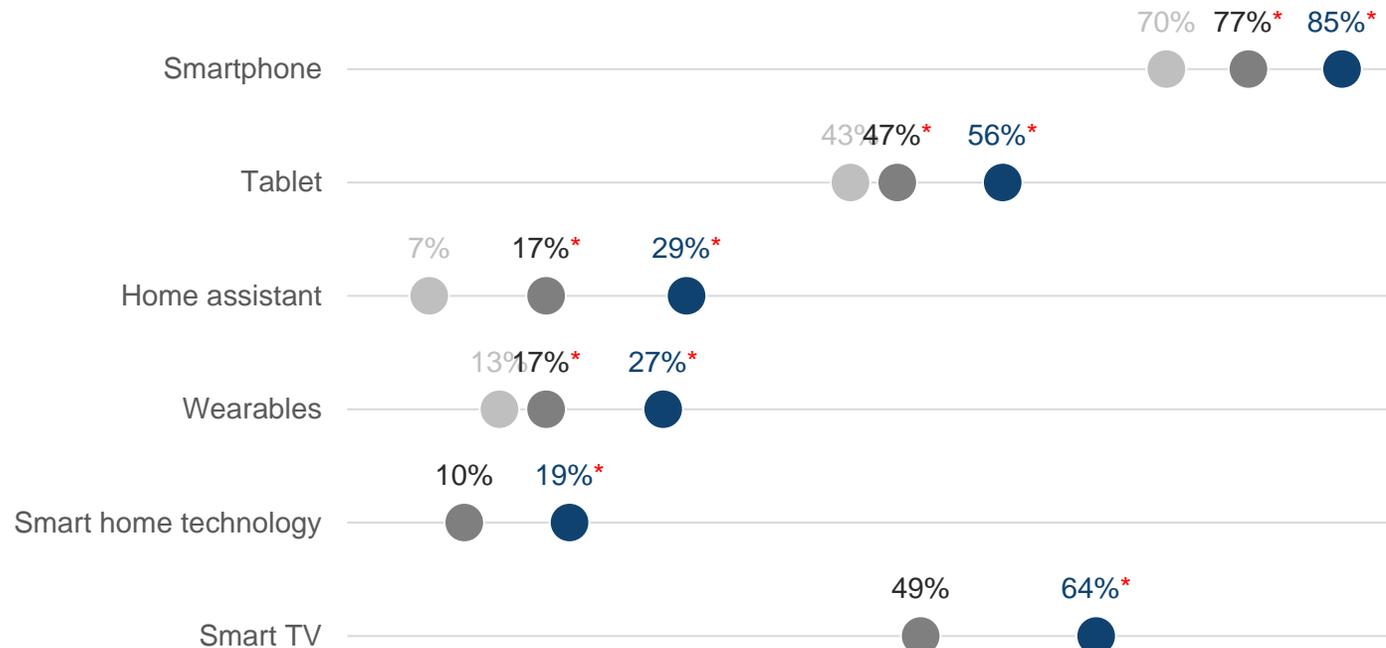
Q17. Please rank order the factors that would be most important in your decision as to which ones to attend, with 1 being the most important factor.



TECH OWNERSHIP, USE AND SPENDING

Ownership rates of smart technology devices continues to increase among older adults.

Device ownership among the 50+
2017 (n=1,520), 2019 (n=2,607) and 2020 (n=2,256)



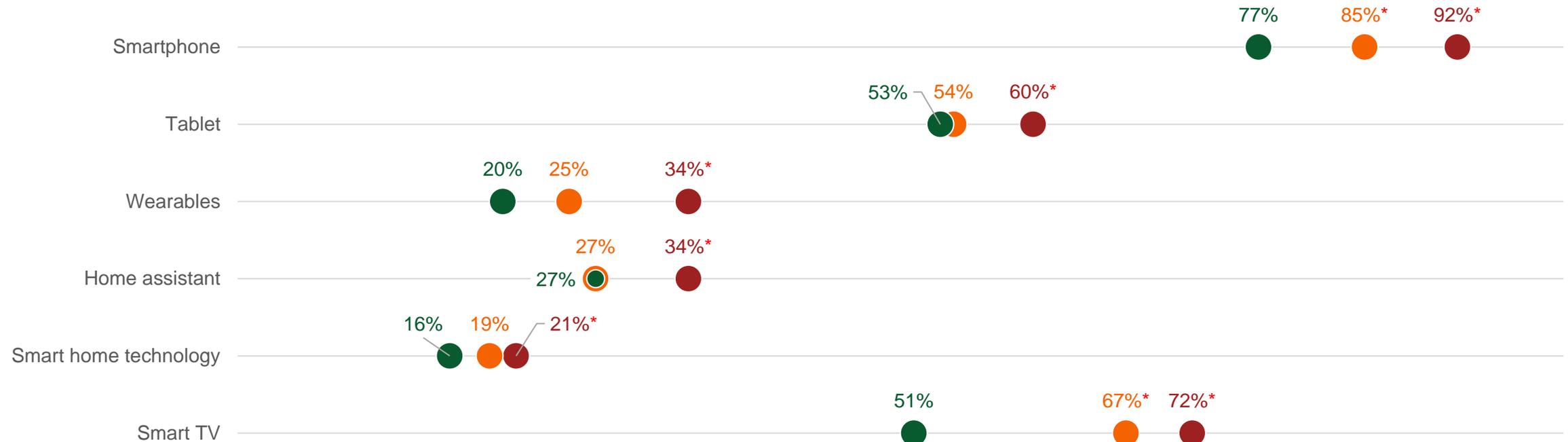
Base: Age 50-plus Respondents

QTech1/Q2. Which of the following items do you have? Q6. Do you currently own a smart TV?

* Indicates a significant difference at a 95% confidence level

All 50-plus age bands show increases in device ownership year over year, although ownership continues to skew to the younger age band of 50–59.

Device ownership among the 50+, by age
 50-59 (n=808), 60-69 (n=798), and 70+ (n=650)

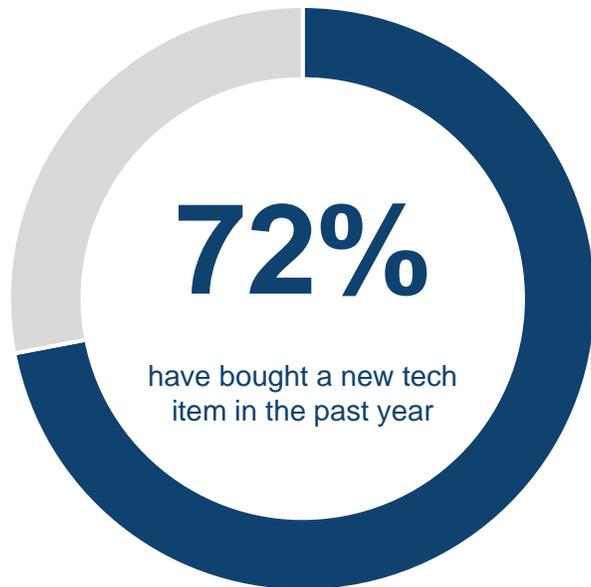


Base: Age 50-plus Respondents

Q2. Which of the following items do you have? Q6. Do you currently own a smart TV?

* Indicates a significant difference at a 95% confidence level

The pandemic is likely driving the exponential increase in tech spending. Compared to 2019, tech spending among older adults is up 194%, from \$394 to \$1144.

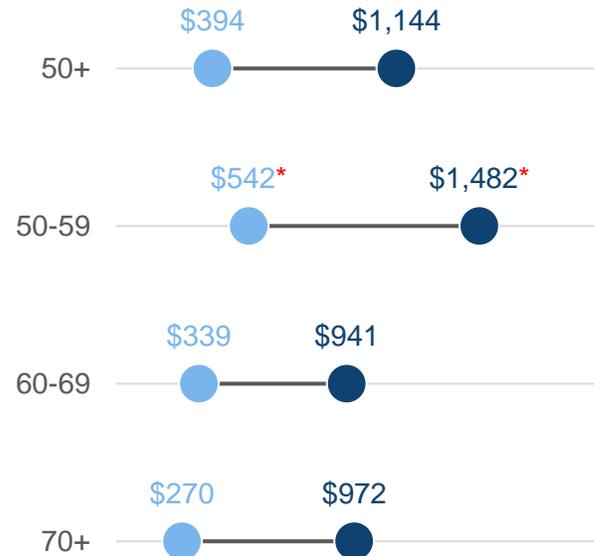


Base: Total Respondents

Q30. Which specific technology products did you purchase in the past year (September 2019 - August 2020), for yourself and/or your household?

Q31. Thinking about all of the different tech items you purchased in the past 12 months (September 2019 - August 2020), approximately, how much did you spend in total? (NOTE: Outliers removed)

Change in technology spending in the past year
2019 vs. 2020



*2019 asked during summer July 2018- June 2019, 2020 asked September 2019-August 2020)

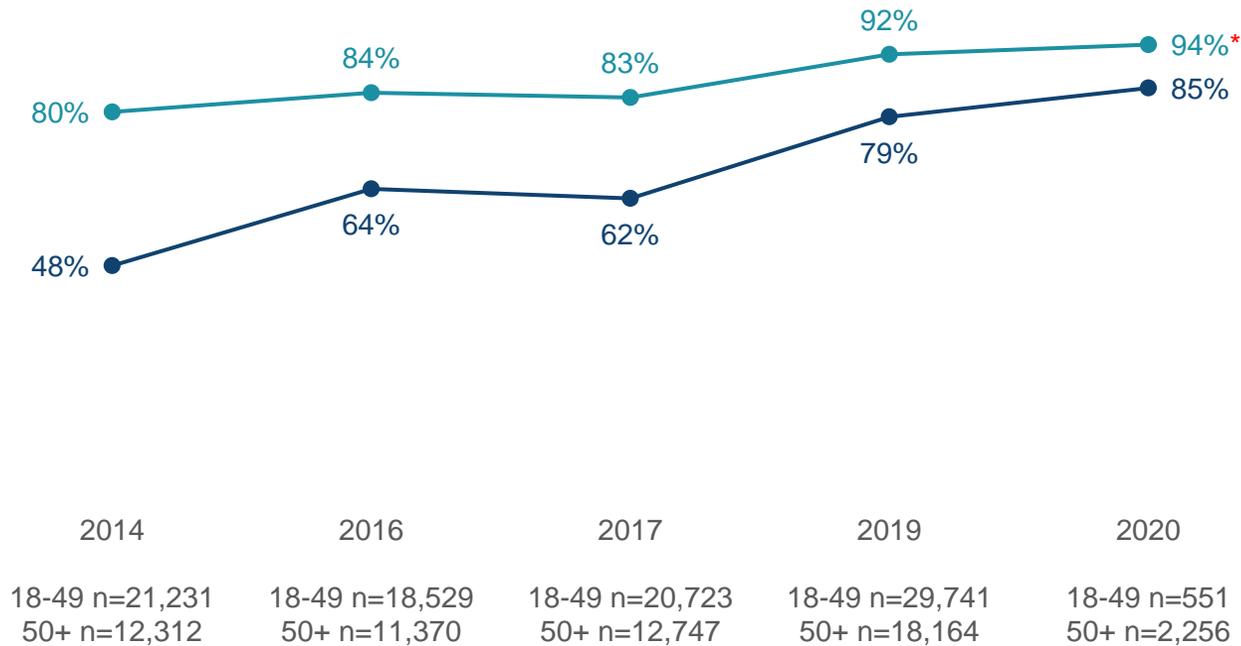
* Indicates a significant difference at a 95% confidence level

Tech Items Purchased 2019 to 2020

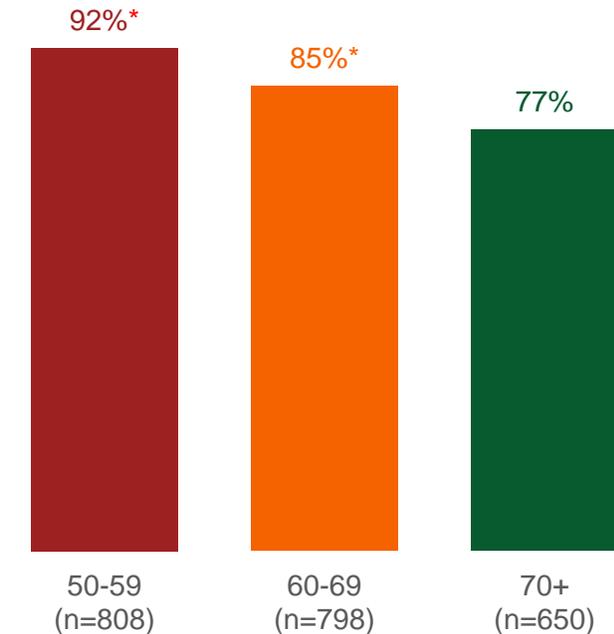
	2020	2019
base:	50	50
base:	2,256	2,575
Smartphone	35%	23%
Smart TV	23%	11%
Bluetooth headset/ear buds	22%	10%
Laptop computer or Netbook	19%	9%
Tablet	15%	10%
Wearable device	13%	7%
Home assistant	11%	7%
Smart home technology/security	10%	5%
Desktop computer	8%	5%
Home audio equipment	5%	2%
Digital camera	5%	3%
Gaming system	4%	2%
E-reader	4%	3%
GPS tracker designed to monitor/share location	3%	-
Home health and safety device	2%	1%
Virtual reality (VR) device	1%	1%
Other	4%	1%

Ownership of smartphones among the 50-plus has increased significantly year over year. Those 70-plus increased the most, up from 62% in 2019.

Smartphone ownership
Adults **18-49** and **50+**



Smartphone ownership
Adults **50-59**, **60-69**, and **70+**



2014-2019 Source: Forrester Analytics; Consumer Technographics Online Benchmark Survey (Part 2)

2020 Source: Q2. Which of the following items do have/own?

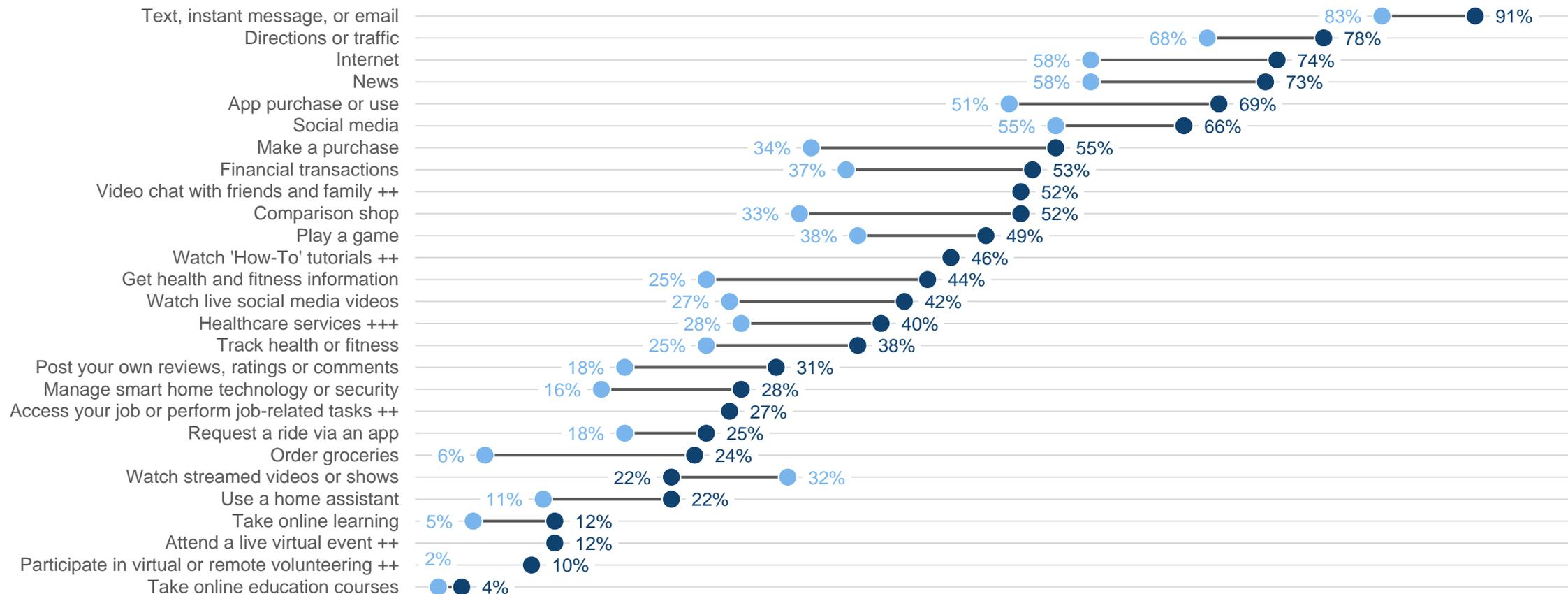
* Indicates a significant difference at a 95% confidence level

Base: Total 50-plus Respondents

Older adults continue to use smartphones to gather information and to connect socially but activities that make life easier such as financial transactions and ordering groceries gained traction.

Activities done on a smartphone in the past 3 months

Among adults 50-plus who use a smartphone, 2019 (n=2,003) and 2020 (n=1,924)



Base: Those who use a Smartphone

++ indicates new item in 2021

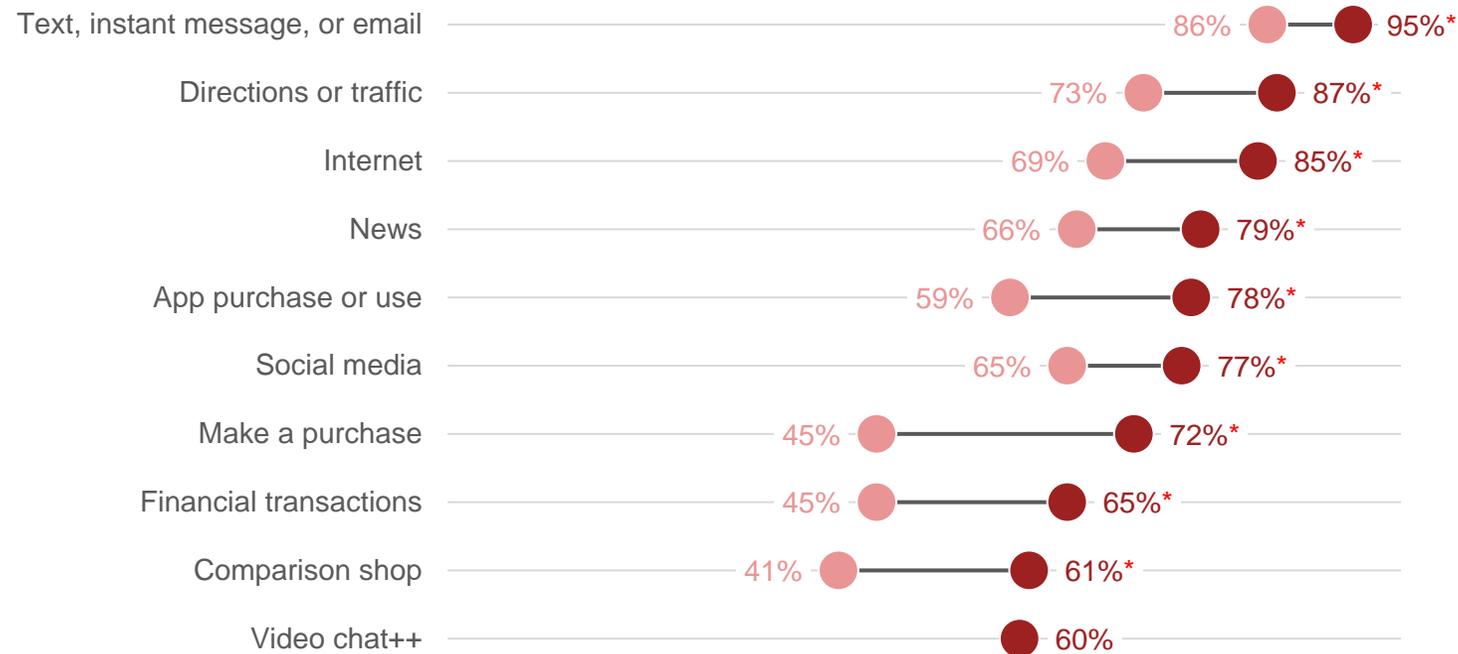
Q4. For each device listed below, please indicate the activities that you have used it for in the past 3 months?

* Indicates a significant difference at a 95% confidence level

+++ previously labeled as "Medical Communications"

Among those age 50–59, year-over-year growth in smartphone activity across all categories of use grew dramatically. The largest change was “making a purchase,” which increased 60%.

Top 10 smartphone activities year-on-year among those 50-59
 2019 (n=832) and 2020 (n=741)

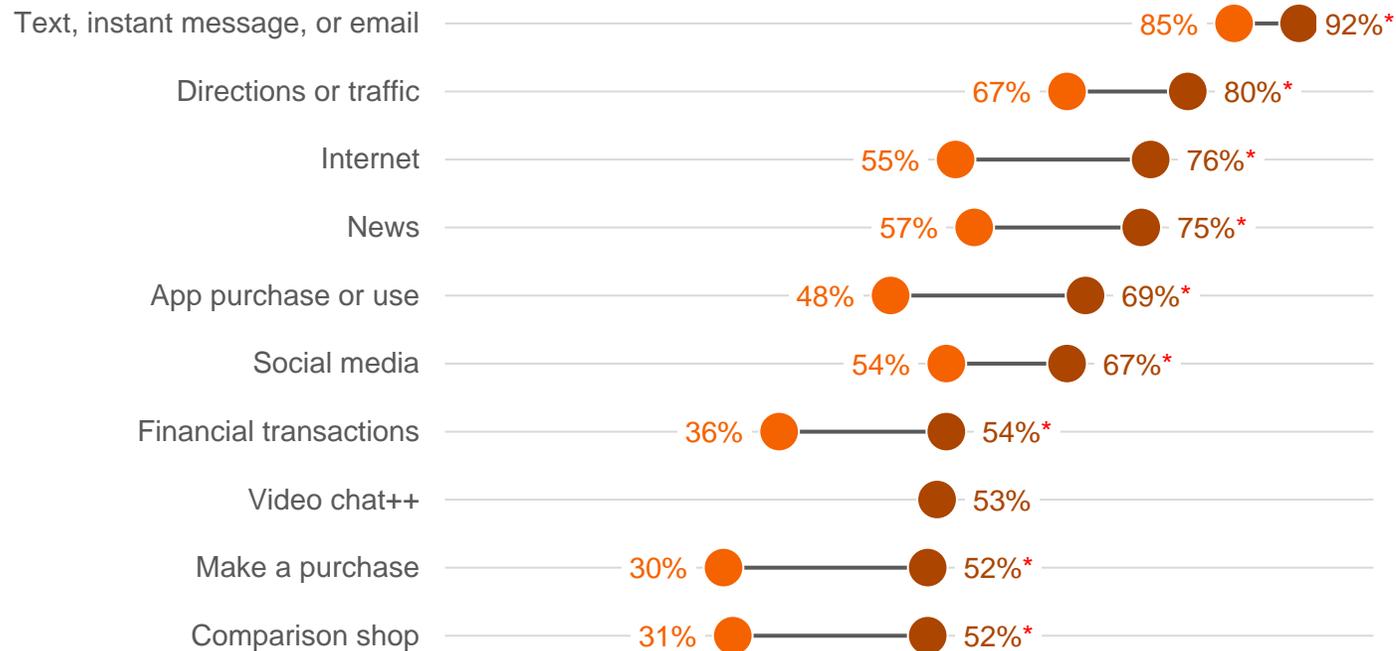


Base: Age 50-plus Respondents
 Q4. For each device listed below, please indicate the activities that you have used it for in the past 3 months?

++ indicates new item in 2021
 * Indicates a significant difference at a 95% confidence level

Smartphone activities grew dramatically across age bands, with video chat now making the top 10 among those ages 60–69.

Top 10 smartphone activities year-on-year among those 60-69
 2019 (n=691) and 2020 (n=687)



Base: Those who use a Smartphone (60-69)

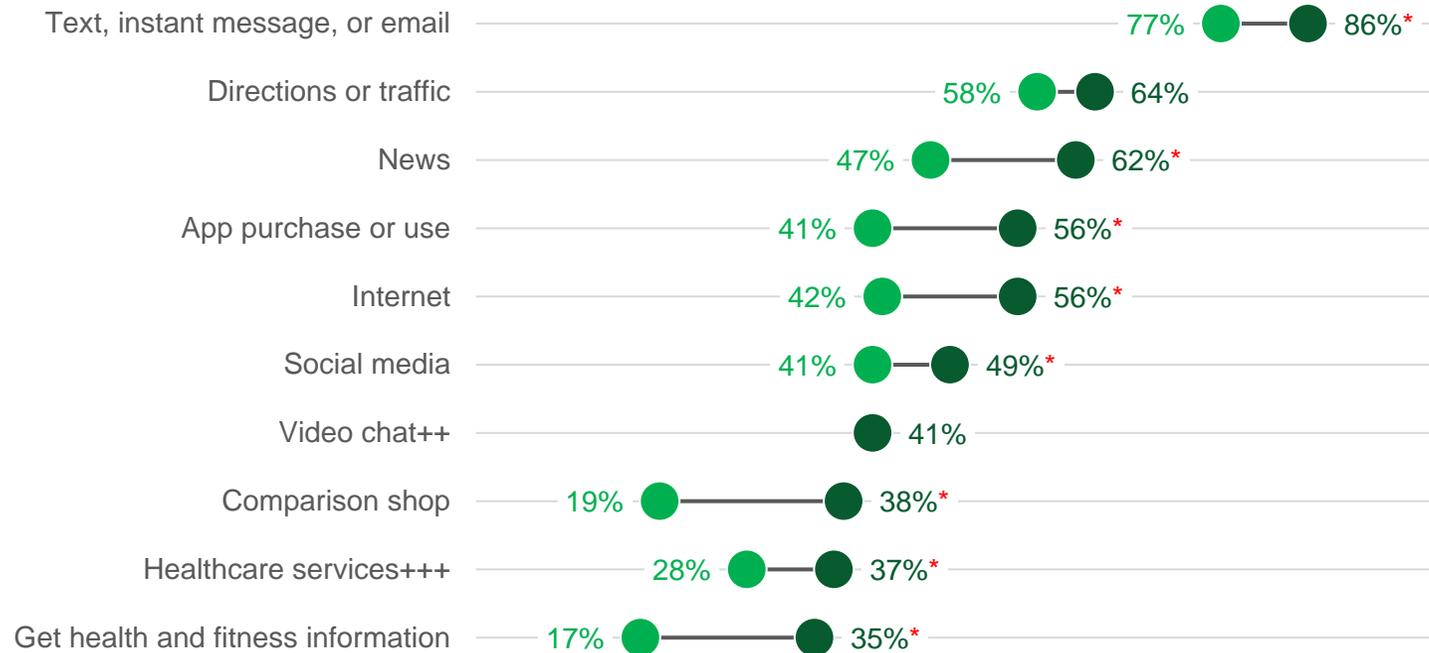
Q4. For each device listed below, please indicate the activities that you have used it for in the past 3 months?

++ indicates new item in 2021

* Indicates a significant difference at a 95% confidence level

While making a purchase on their smartphones does not hit the top 10 for those 70+, medical communications and getting health information does.

Top 10 smartphone activities year-on-year among those 70+
2019 (n=480) and 2020 (n=496)



Base: Those who use a Smartphone (70+)

Q4. For each device listed below, please indicate the activities that you have used it for in the past 3 months?

* Indicates a significant difference at a 95% confidence level

++ indicates new item in 2021

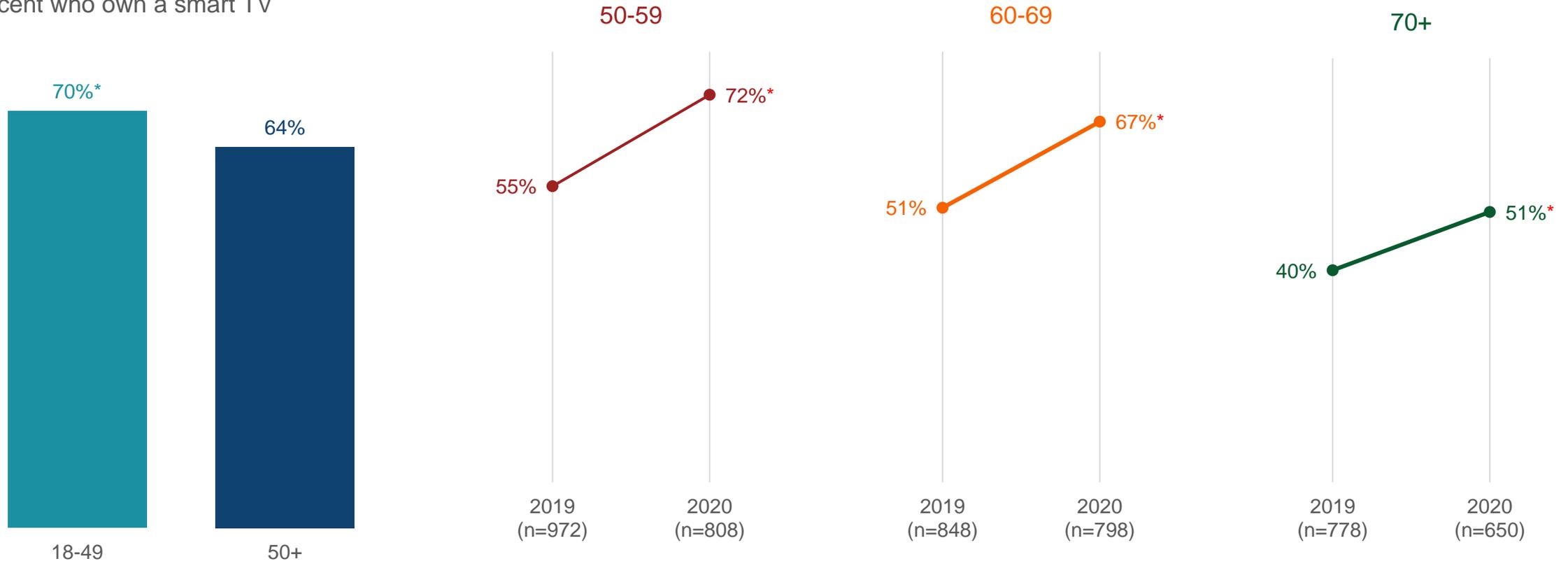
+++ previously labeled as "Medical Communications"



**DIGITAL ENTERTAINMENT &
THE DIGITAL HOME**

Among adults ages 50-plus, smart TV ownership has increased by double digits year over year, from 49% in 2019 to 64% in 2020.

Percent who own a smart TV



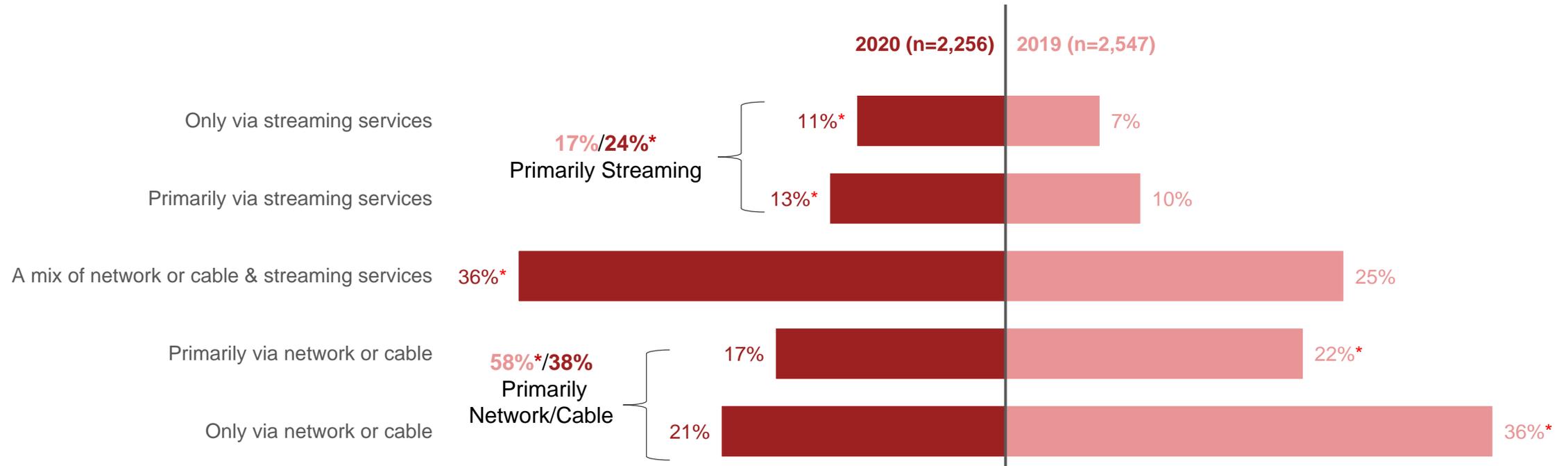
Base: Total Respondents

Q6. Do you currently own a smart TV?

* Indicates a significant difference at a 95% confidence level

Since the onset of the pandemic, older adults report a dramatic shift in how they consume entertainment. Only 38% primarily watch network/cable TV compared to 58% in 2019.

Methods of watching shows, series, and videos
Adults 50+, 2020 and 2019



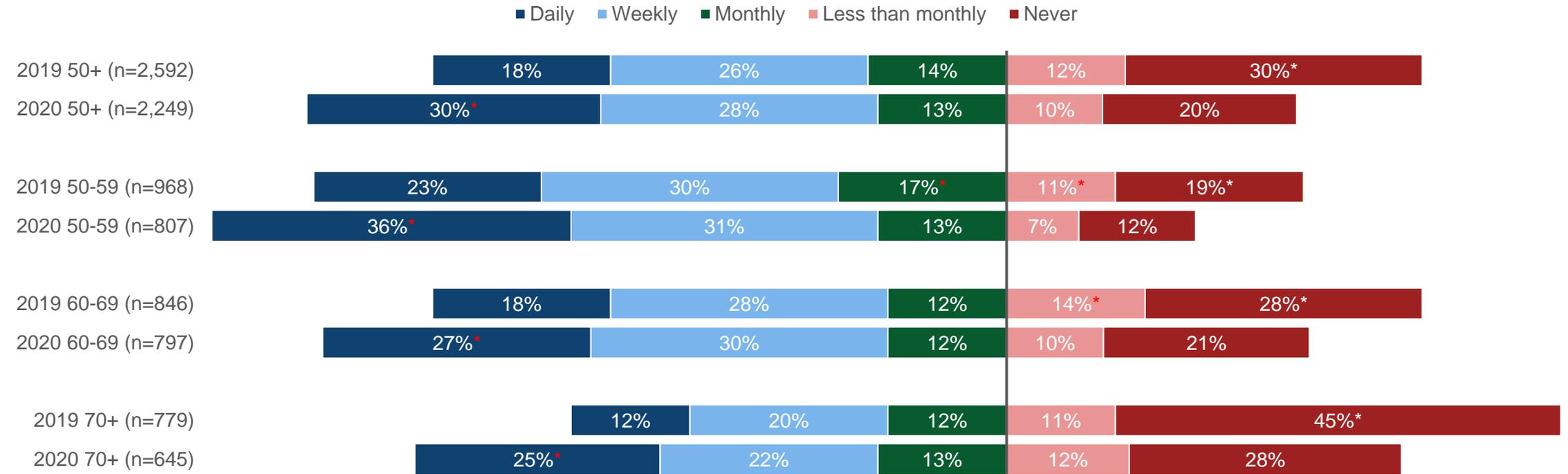
Base: Total 50-plus Respondents

Q7. How do you generally watch shows, movies, series, and/or videos?

* Indicates a significant difference at a 95% confidence level

Older adults are streaming weekly or more frequently, up from 44% in 2019 to 58% in 2020.

Frequency of streaming
2019 vs 2020, by age



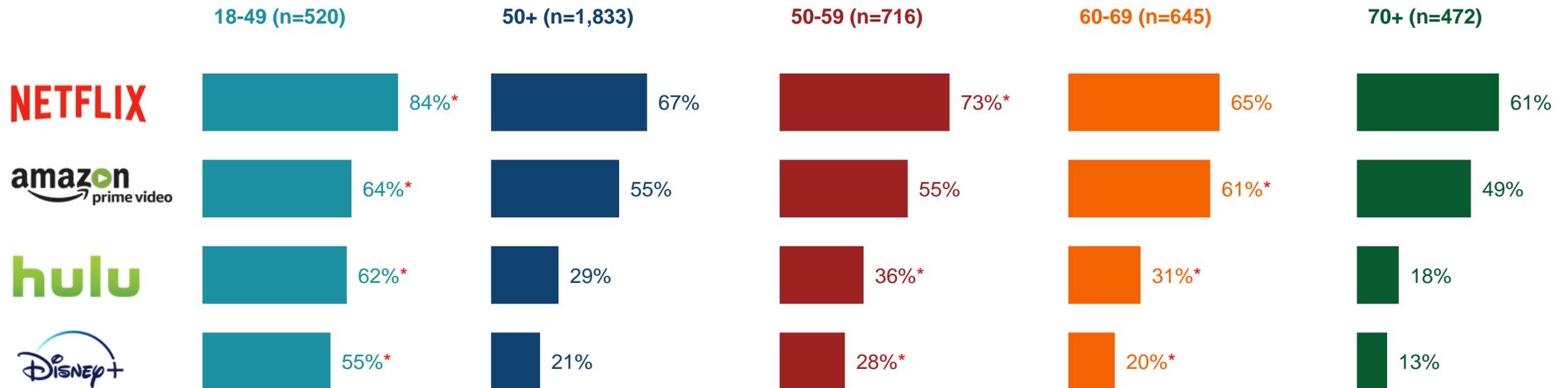
Base: Total Respondents (Answers not forced)

Q8. How often do you watch streamed shows, movies, series, or videos?

* Indicates a significant difference at a 95% confidence level

Netflix is currently the most used streaming service across age bands. Since its launch in early 2020, Disney+ is the fourth most used streaming service.

Streaming services used



Base: Respondents Who Stream Content

Q9. Which of the following streaming services do you currently subscribe to?

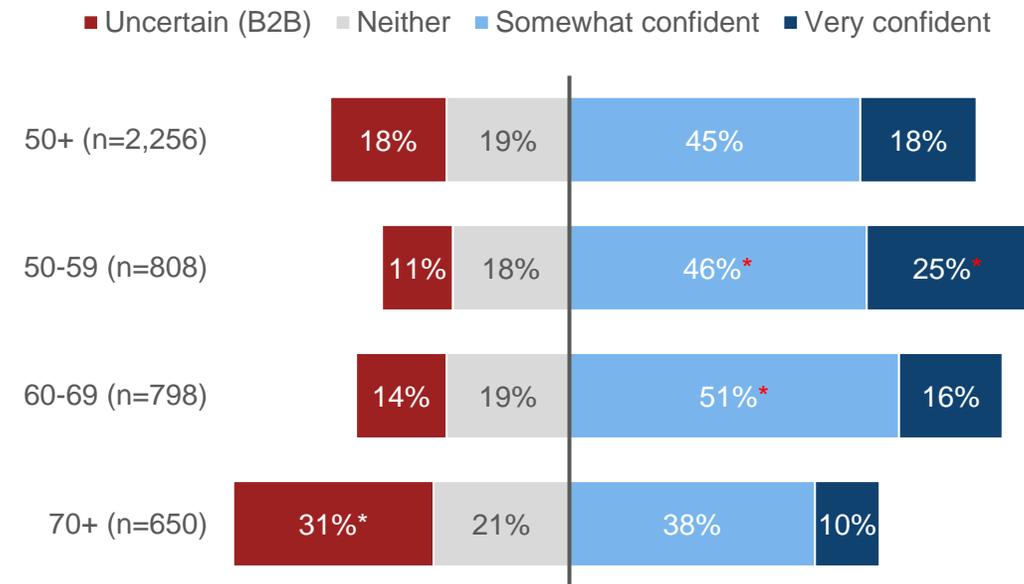
* Indicates a significant difference at a 95% confidence level



DIGITAL LITERACY & PRIVACY

Approximately 60% of those 50-plus say they are confident in their use of technology. That said, with a significant increase in dependency on technology during the pandemic, 54% would like to improve their knowledge to more easily connect with others.

Confidence in use of technology

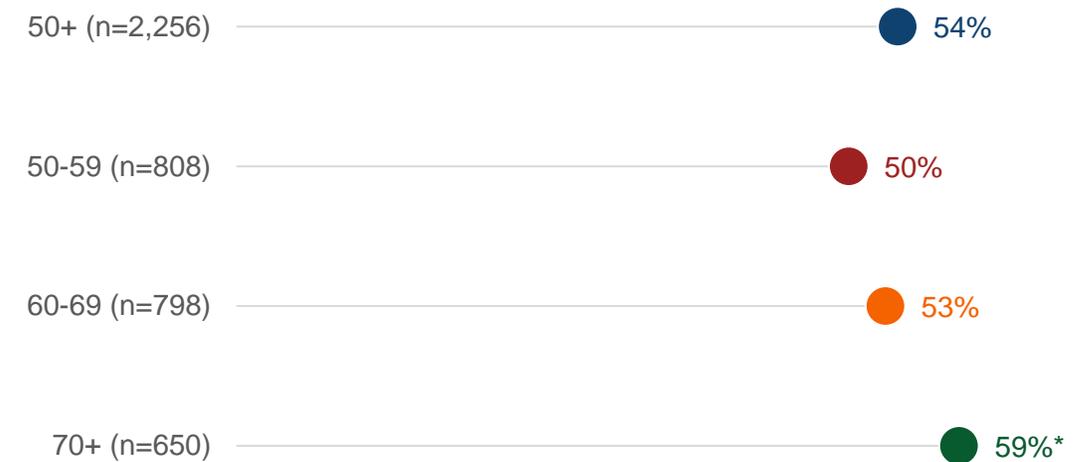


Base: Total 50-plus Respondents (n=2,256)

Q21. When it comes to the use of technology, which of the following best describes you?

* Indicates a significant difference at a 95% confidence level

Would like a better grasp on technology

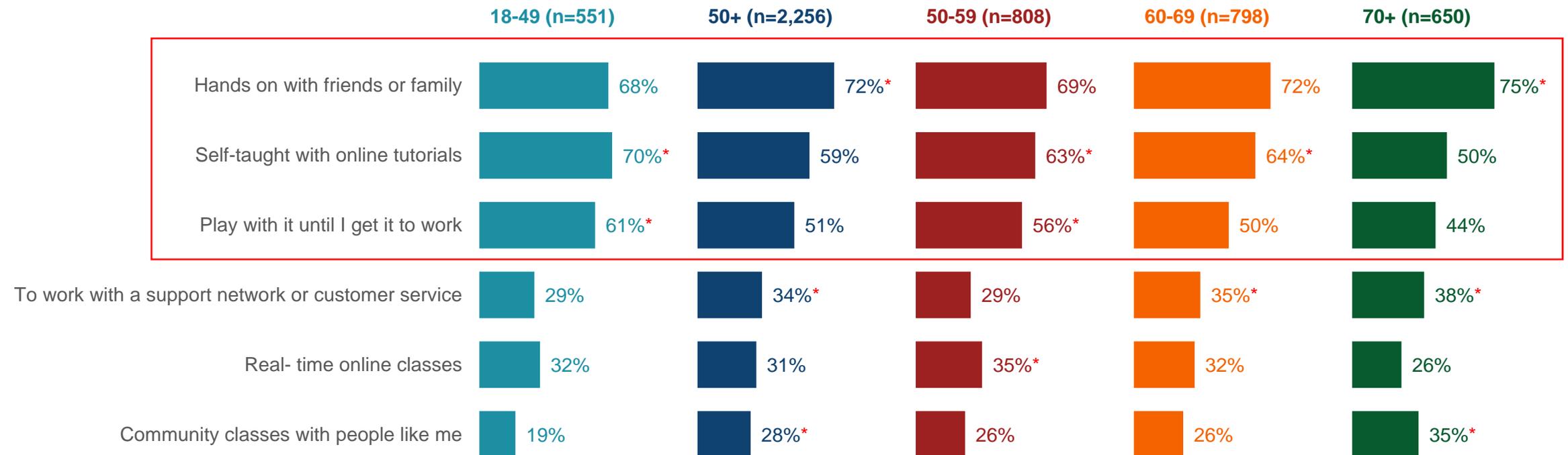


Base: Total 50-plus Respondents (n=2,256)

Q20. Do you wish you had a better grasp of technology in general to allow you to more frequently and easily connect with others?

The majority of those 50-plus prefer to learn new technology hands-on with someone they trust, like friends or family, helping them. Online tutorials come in second, followed by just working with it independently.

Preference for learning (ranked 1, 2, or 3)



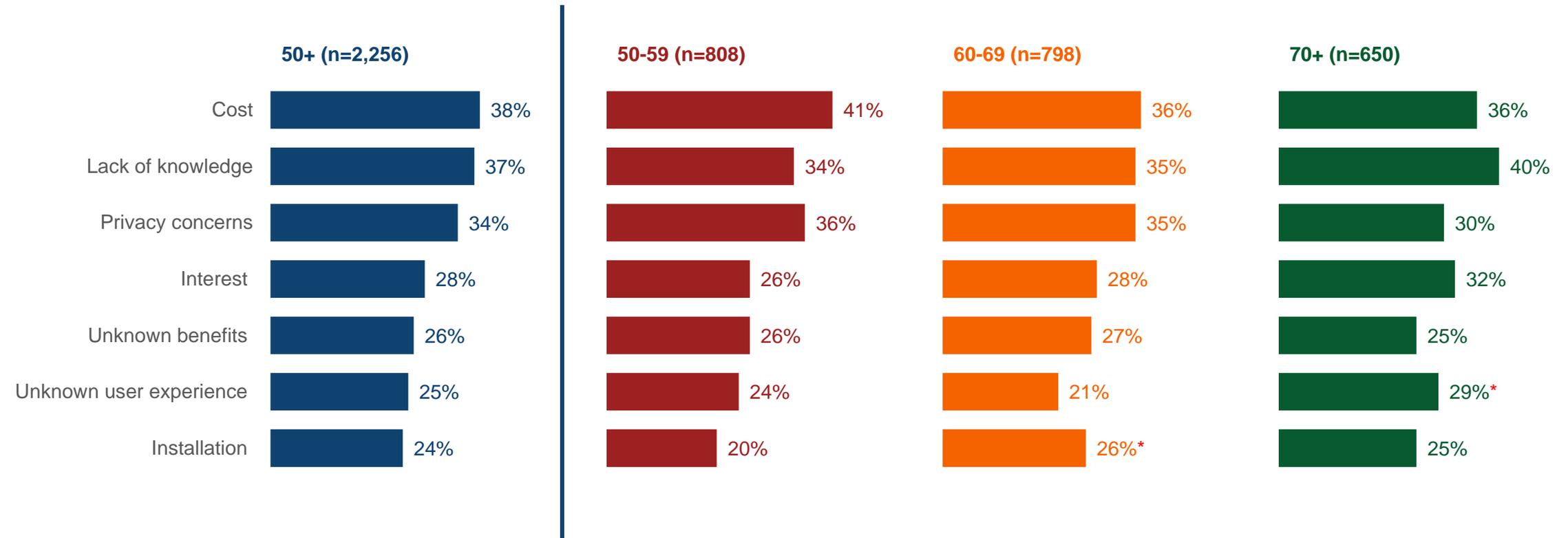
Base: Total Respondents

Q24. Please place in rank order the ways you prefer to learn about new technology. Rank only those you would consider using.

* Indicates a significant difference at a 95% confidence level

Older adults report cost, lack of knowledge, and privacy concerns as the top barriers to adopting new technology.

Top barriers to adoption of new technology (ranked 1st/ 2nd/ 3rd)



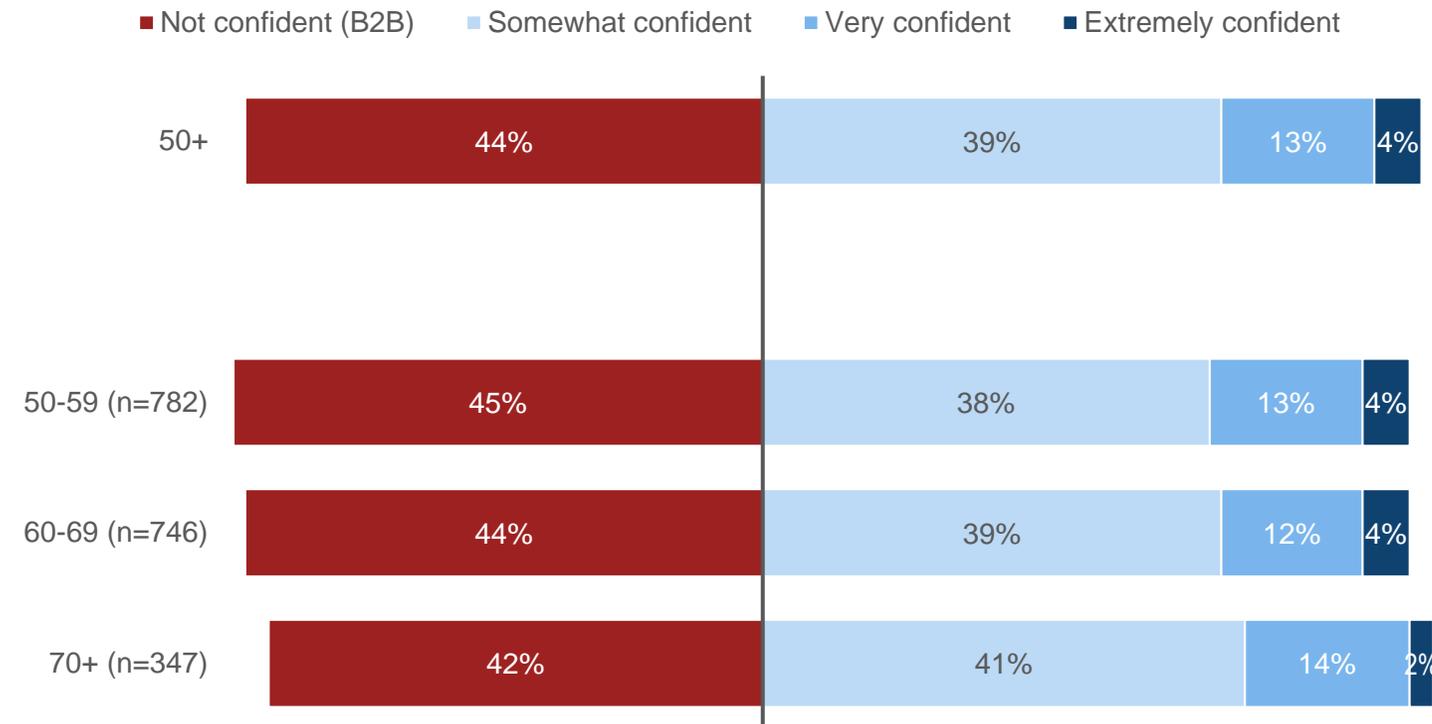
Base: Total 50-plus Respondents (n=2,256)

Q29A. Please rank order what you believe holds you back from adopting new technology that could help you engage with friends and family.

* Indicates a significant difference at a 95% confidence level

About two in five of adults 50-plus are not confident that what they do online remains private. This sentiment remains steady across age bands.

Confidence in online privacy



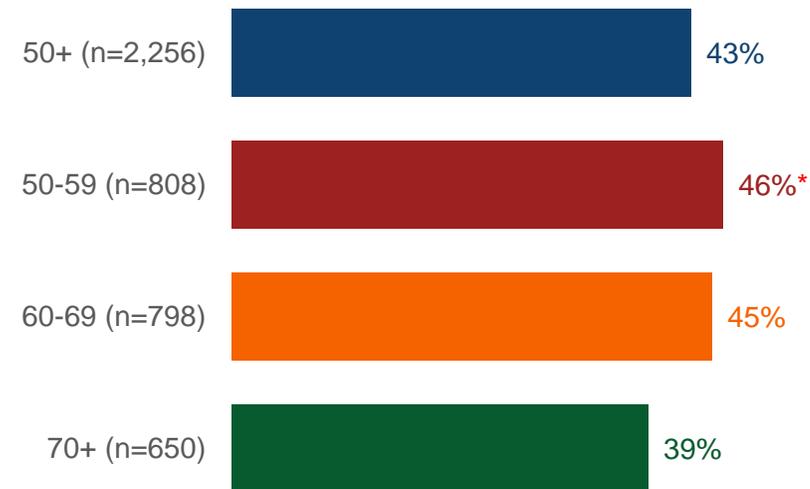
Base: Respondents 50-plus who use at least one device (n=2,097)

Q.34. How confident are you that the things you do online when you are using a wireless device such as a laptop, Smartphone, or iPad, are private and will not be used or seen by others without your permission?

* Indicates a significant difference at a 95% confidence level

Respondents don't fully understand privacy policies. Fewer than half (43%) understand that a privacy policy does not stop a website from sharing their information, and only about half (53%) are aware that ad agencies are the "third party" in online privacy policy agreements.

Percent correctly answering "False": When a website has a privacy policy, it means the site will not share my information with other websites and companies without my permission.



Percent correctly answering "True": Advertising agencies are the typical 'third party' in online privacy policy agreements.



Base: Total 50-plus Respondents

Q37. True or False, when a website has a privacy policy, it means the site will not share my information with other websites and companies without my permission.

Q38. True or False, advertising agencies are the typical 'third party' in online privacy policy agreements.

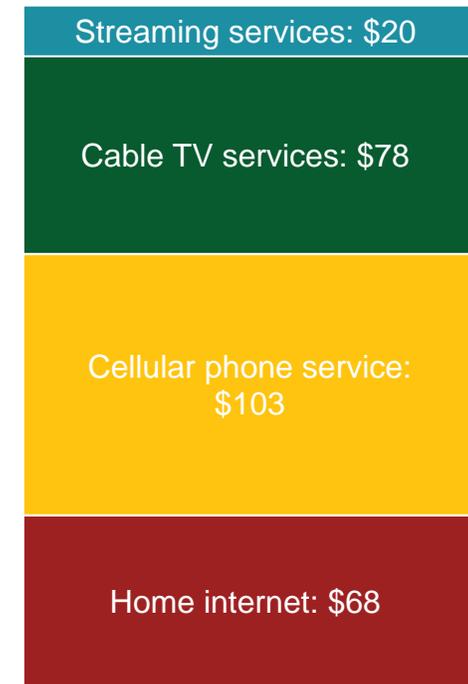
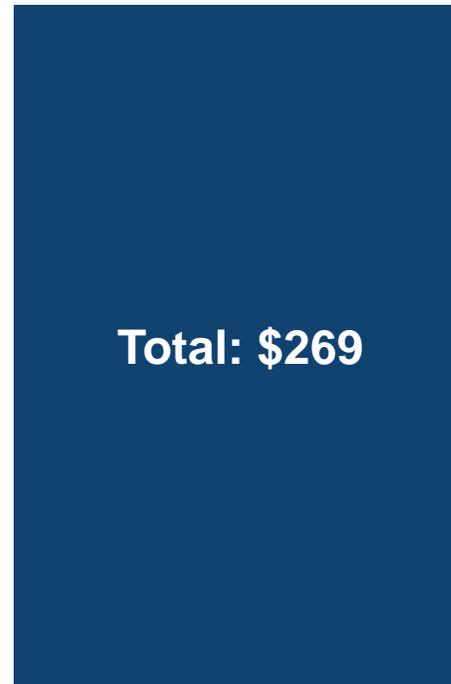
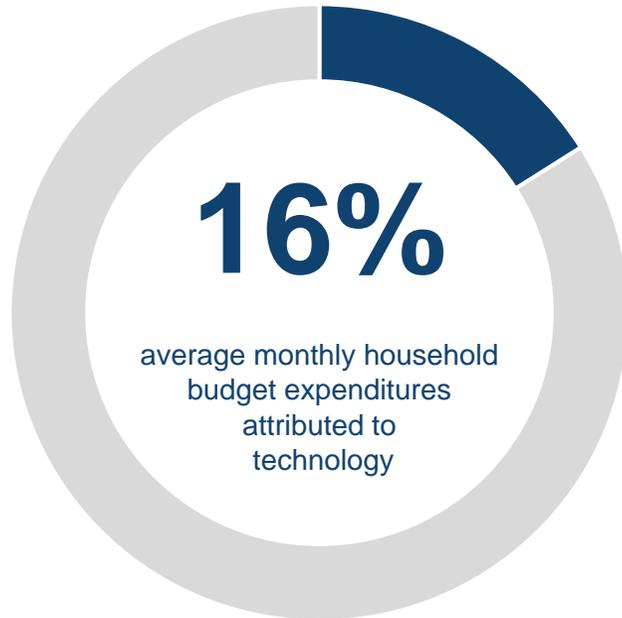
* Indicates a significant difference at a 95% confidence level



DIGITAL EQUITY

On average, older adults spend \$269 on various connectivity services, which accounts for 16% of the household budget.

Monthly household technology expenditures
Total and by spending category



Base: Total 50-plus Respondents (n=2,256)

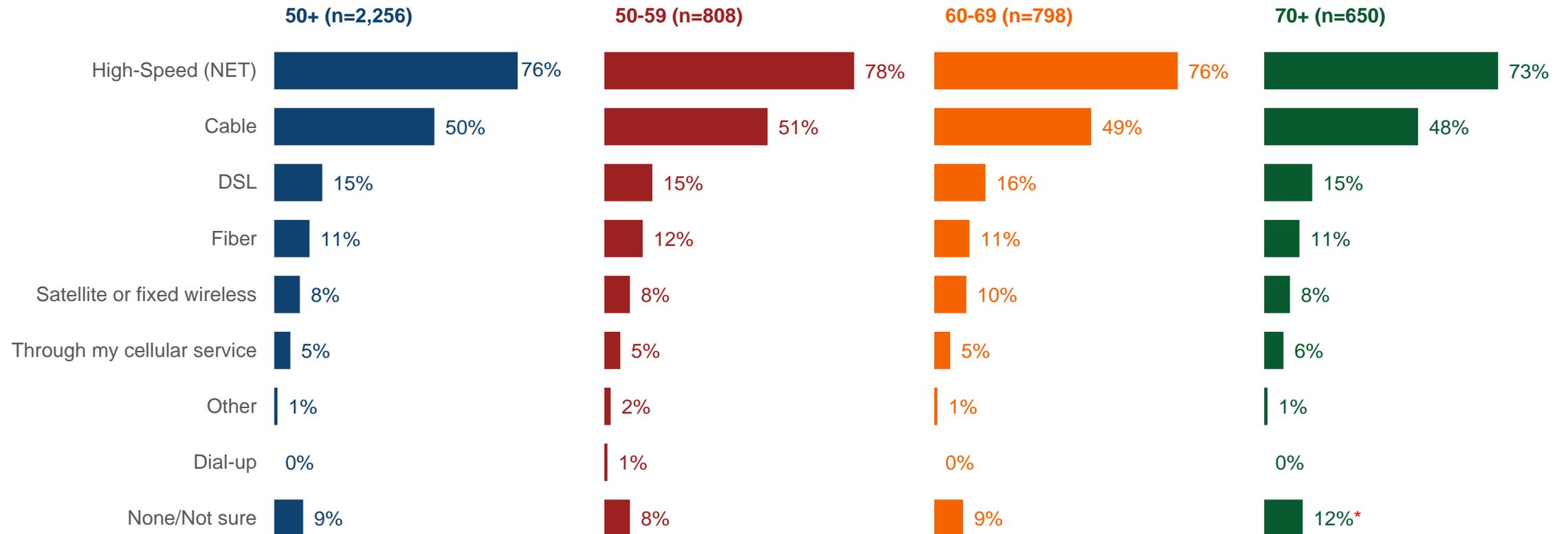
Q32. How much do you spend on each of the following, per month, for you and/or your household?

Q33. Thinking about your monthly household expenses, in total, what percent of those expenses are attributed to technology per month?

* Indicates a significant difference at a 95% confidence level

The majority of those 50-plus have a high-speed internet connection at home.

Type of internet connection at home



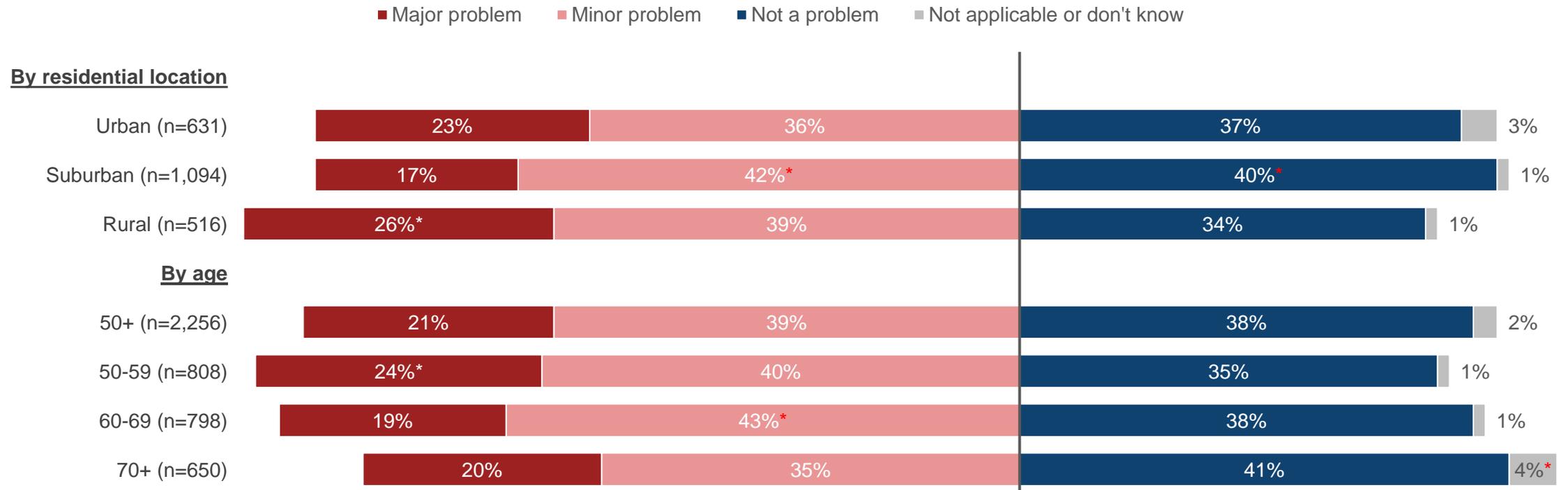
Base: Total 50-plus Respondents

Q5. Please select the type of Internet connection you have in your home.

* Indicates a significant difference at a 95% confidence level

More than three in five (60%) older adults say the cost of high-speed internet is a problem for them personally. Regardless of location, approximately one-fourth of respondents say the cost of internet is a personal hardship.

Cost of access to high-speed internet is a personal issue
By residential location and age



Base: Total 50-plus Respondents

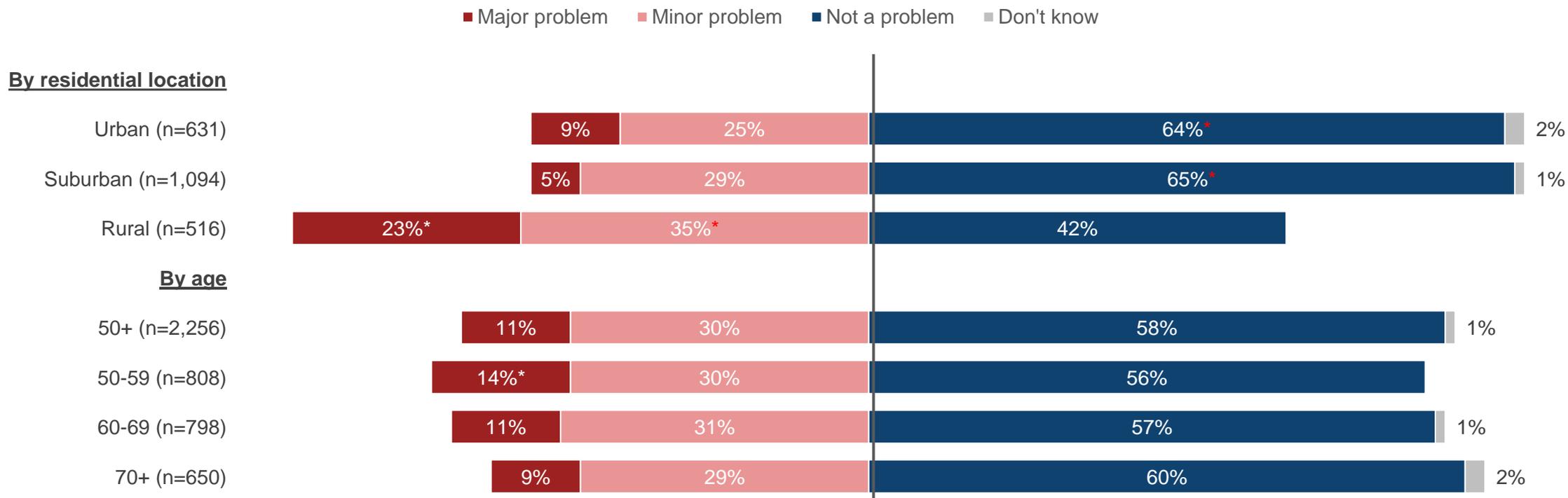
Q5b. How much, if at all, is the cost of monthly high-speed internet a problem for you?

* Indicates a significant difference at a 95% confidence level

Q5a. How much, if at all, is access to high-speed internet a problem in your local community?

Two in five (40%) say getting high-speed internet is a problem in their local community. Those living in rural areas say access to high-speed internet is more of a problem than those who live in either an urban or suburban location.

Community access to internet is a problem
By residential location and age



Base: Total 50-plus Respondents

Q5a. How much, if at all, is access to high-speed internet a problem in your local community?

* Indicates a significant difference at a 95% confidence level

Q5b. How much, if at all, is the cost of monthly high-speed internet a problem for you?

Methodology: Quantitative Survey, n=2,807

Objective: Objective: Repeat survey exploring technology use and attitudes among the 50-plus around device ownership, common activities performed online, social networking, mobile usage, privacy and trust, and connecting with friends and family

Methodology: Online survey using NORC's research panel + Dynata

Qualifications: Ages 18+, US Pop

Sample: n=2,807 ages 18+, (n=2,271 ages 50-plus, MoE= ± 2.92%)

Interviewing Dates: September 25 – October 20, 2020

Language of Interview: English and Spanish

Weighting: The is weighted according to demographics for US adults age 18+, 50+, and by generation; similar to 2019 weighting design

Questionnaire length: The survey was approximately 26 minutes in length online

Note: NEW IN 2021: COVID-19 Impact, Digital Literacy, The Digital Divide, Barriers to Tech Ownership



Refer to <https://www.aarp.org/research/topics/technology/info-2021/2021-technology-trends-older-americans.html> for AAPOR-compliant methodology

Respondent profile

	18-49	50+	50-59	60-69	70+
Base:	551	2256	808	798	650
Gender					
Male	49%	47%	49%	47%	44%
Female	50%	53%	51%	53%	56%
Education					
Less than HS	9%*	6%	6%	6%	5%
HS graduate	26%	35%*	33%	33%	40%*
Vocational/tech school/some college/ associates	29%*	26%	25%	28%	24%
Bachelor's degree	22%*	17%	19%*	17%	13%
Post grad study/professional degree	13%	17%*	17%	16%	18%
Ethnicity					
White, non-Hispanic	54%	69%*	62%	70%*	77%*
Black, non-Hispanic	13%*	11%	12%	11%	9%
Other, non-Hispanic	0%	1%	1%	2%	1%
Hispanic	21%*	11%	15%*	11%	8%
Non-Hispanic	4%*	2%	4%*	1%	1%
Asian, non-Hispanic	7%*	5%	6%	5%	5%
Income					
Less than \$25K	25%	18%	16%	17%	22%
\$25K-\$49.9K	21%	25%	21%	25%	30%
\$50K-\$74.9K	19%	20%	18%	21%	21%
\$75K+	36%	37%	46%	37%	27%



* Indicates a significant difference at a 95% confidence level



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