

2017 AARP Cognitive Activity and Brain Health Survey

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AARP Research

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About AARP

AARP is the nation's largest nonprofit, nonpartisan organization dedicated to empowering Americans 50 and older to choose how they live as they age. With nearly 38 million members and offices in every state, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands, AARP works to strengthen communities and advocate for what matters most to families with a focus on health security, financial stability and personal fulfillment. AARP also works for individuals in the marketplace by sparking new solutions and allowing carefully chosen, high-quality products and services to carry the AARP name. As a trusted source for news and information, AARP produces the world's largest circulation publications, AARP The Magazine and AARP Bulletin. To learn more, visit www.aarp.org or follow @AARP and @AARPadvocates on social media.

The views expressed herein are for information, debate, and discussion, and do not necessarily represent official policies of AARP.

Acknowledgments

GfK conducted this survey for AARP using its nationally representative online panel, Knowledge Panel. This report was prepared by Laura Mehegan, Chuck Rainville & Laura Skufca in AARP Research. For additional information about the survey, contact Laura Mehegan [at lmehegan@aarp.org](mailto:lmehegan@aarp.org). Media inquiries should be directed to Greg Phillips at gphillips@aarp.org.

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Objectives

- To characterize the participation in cognitively stimulating activities (CSAs)* among adults age 40+.
- To understand adults' willingness to include more CSAs into their daily routines.
- To explore the relationship between mental well-being and brain health with the engagement in CSAs.

*According to the Global Council on Brain Health (GCBH), cognitively stimulating activities (CSAs) are mentally engaging activities or exercises that challenge a person's ability to think.

Methodology

- An online survey fielded May 3-18, 2017 among a nationally representative sample of 1,140 Americans age 40+.
- Additional interviews were conducted to achieve the following samples (1,614 total interviews):
 - 283 Hispanic/Latinos age 40+ (conducted in both English and Spanish)
 - 272 African Americans age 40+
 - 151 Asian Americans age 40+.
- The data were weighted by age, gender, race, ethnicity, employment status and income.
- All estimates are for the general 40+ US population unless otherwise noted.
- The margin of error for the national sample of 1,140 adults age 40+ is +/- 3.1 percentage points. The margin of error among subgroups (e.g., age cohorts, race/ethnicity oversamples) is higher.
- Percentages may not equal 100% due to rounding.

Key Findings

Major takeaways:

- Adults who self-report their cognitive functioning, health, and well-being higher:
 - Engage in more cognitively stimulating activities (CSAs) per week
 - Have higher average mental well-being scores
 - Have a desire to do even more to improve their brain health.
- Over eight in 10 adults age 40+ said they are willing to participate in cognitive training and three-quarters are willing to spend 15-minutes or more per day engaged in it. Those who are most willing to participate rate their current cognitive abilities the highest.
- Because adults who rate their cognitive abilities low are less inclined to increase their engagement in cognitively-beneficial activities, an opportunity exists to provide education and outreach on the benefits of such activities, regardless of perceived ability.
- About one-quarter of adults age 40 and older, and more than four in 10 of those who identify as racial/ethnic minorities, believe that the best way to maintain/improve brain health is to play brain games. Little scientific evidence currently supports this notion suggesting another good opportunity for public education.
- The most-frequently reported barrier to adding more mentally-stimulating activities is being uncertain of which activities benefit brain health. This suggests public information on brain-healthy activities will benefit adults age 50+.
- Attending religious services is a top activity adults age 40+ believe maintains or improves brain health.

Key Findings

Cognitive Function, Health, and State of Being

- A majority of adults rate their cognitive function high with the exception of the ability to remember names, dates, grocery lists, etc. where only four in 10 (44%) said it was “excellent” or “very good.”
- While a large majority of all 40+ adults feel that their ability to learn new things is “excellent” or “very good,” significantly fewer adults age 70 and older rate this ability as high.

Engagement in Cognitively Stimulating Activities

- Adults age 40+ engage in an average of 8.4 different CSAs per week (out of 32 possible CSAs). Just over one-quarter engage in 11 or more CSAs per week.
- Women engage in significantly more CSAs per week than men (9.2 vs. 7.5) as do those with more education (8.9 vs. 7.4).
- Adults age 40+ who engage more frequently in brain-healthy activities (e.g., healthy diet, exercise) engage in significantly more CSAs per week compared to those who engage infrequently.
- Adults age 40+ who report their cognitive function, health, ability to learn, and their state of being as “excellent” engage in significantly more CSAs each week and have significantly higher average mental well-being scores compared to those who self-report those characteristics as “poor.”

Key Findings

- Adults age 40+ who report a willingness to try new activities engage in an average of 14.6 different CSAs per week which is significantly more than the average (8.4) and more than double those who say they never try new activities (6).
- The top individual CSAs or brain-healthy activities that at least half of adults age 40+ engage in weekly or more often are: Cooking or preparing meals, watching the news, reading, working at a job, budgeting or paying bills, praying in private, exercising, and socializing.

Adding Mentally-Stimulating Activities

- The top five activities adults age 40+ are willing to give up in order to add more mentally-stimulating activities are: Watching TV/streaming movies, surfing the internet, playing online games not meant for brain training, recreational shopping, and doing nothing in particular.
- Less than half of adults age 40+ are confident they can add more mentally-stimulating activities into their weekly routine and say they intend to do so. However, half or more women, Hispanic/Latino adults, and African American/Black adults intend to add more.
- More women and Hispanic/Latino adults age 40+ see the benefits of adding more mentally-stimulating activities into their weekly routines.

Self-reported cognitive function, health, and well-being

All cognitive functions were reported as “excellent/very good” by a majority of adults with one notable exception: Less than half of adults age 40+ said their ability to remember names, dates, grocery lists, etc. is “excellent” or “very good.”

Executive Function

Problem-solving skills:

- 67% -- Excellent/Very good
- 25% -- Good
- 6% -- Fair/Poor

Ability to plan trips, outings:

- 64% -- Excellent/Very good
- 22% -- Good
- 12% -- Fair/Poor

Memory

Ability to remember names, dates, grocery lists, etc.:

- 44% -- Excellent/Very good
- 36% -- Good
- 19% -- Fair/Poor

Ability to remember recipes, medication, pay bills, etc.:

- 70% -- Excellent/Very good
- 21% -- Good
- 7% -- Fair/Poor

Processing Speed

Decision making:

- 68% -- Excellent/Very good
- 25% -- Good
- 5% -- Fair/Poor

Recognize correct change:

- 81% -- Excellent/Very good
- 14% -- Good
- 3% -- Fair/Poor

Spatial Skills

Map reading, furniture layout:

- 69% -- Excellent/Very good
- 21% -- Good
- 7% -- Fair/Poor

Reasoning

Ability to see patterns:

- 67% -- Excellent/Very good
- 23% -- Good
- 9% -- Fair/Poor

Attention

Ability to pay attention:

- 64% -- Excellent/Very good
- 29% -- Good
- 7% -- Fair/Poor

How would you describe each of the following at this point in time? Would you say it is excellent, very good, good, fair, or poor?

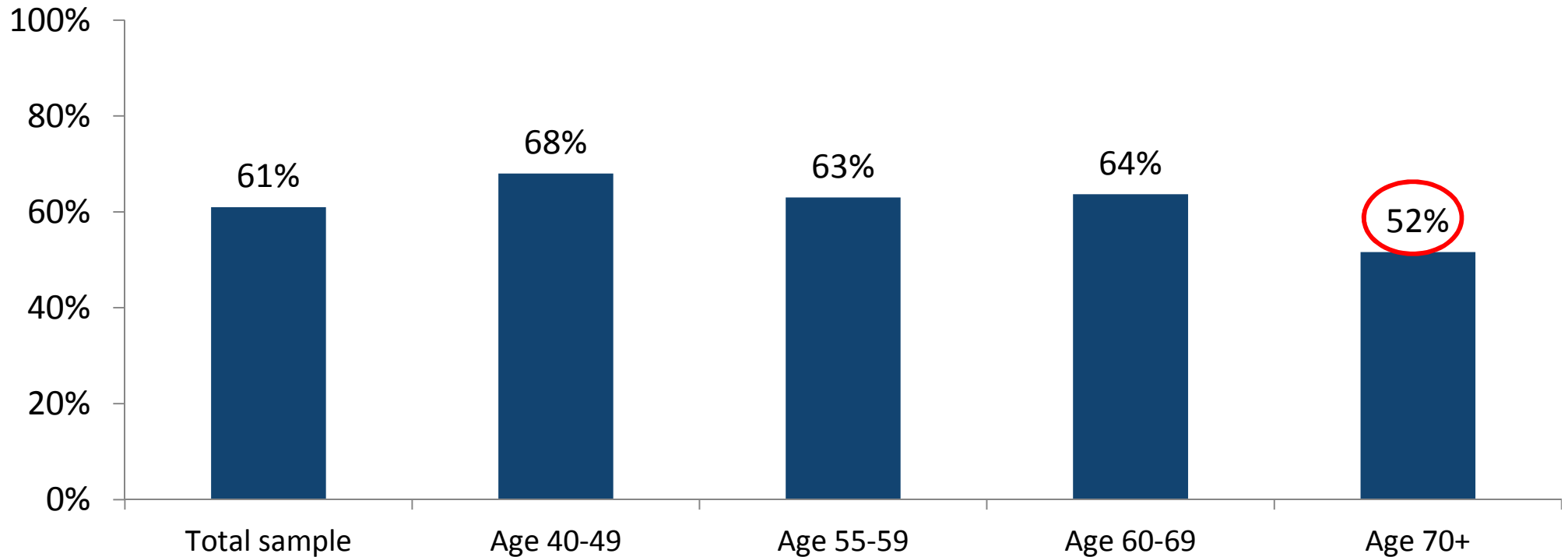
Most cognitive functions were reported as “excellent/very good” by a similar percentage of men and women. However, for three cognitive functions significantly more women than men reported their ability as “excellent” or “very good:” The ability to plan trips or outings, the ability to see patterns, and the ability to pay attention.

Cognitive ability	% who say “excellent” or “very good”		
	Total sample	Men	Women
Ability to plan trips, outings	64%	60%	70%
Ability to see patterns	67%	64%	72%
Ability to pay attention	64%	60%	69%

How would you describe each of the following at this point in time? Would you say it is excellent, very good, good, fair, or poor?

While a majority of adults of all ages say their ability to learn new things is “excellent” or “very good,” significantly fewer adults age 70+ report this ability.

**Percent who say their ability to learn new things in general is
“excellent” or “very good”**



How would you describe each of the following at this point in time? Would you say it is excellent, very good, good, fair, or poor?

Adults age 40+ engage in an average of 8.4 cognitively stimulating activities per week. Those who rate their cognitive abilities and states of being as “excellent” engage in a greater than average number of CSAs and significantly more than those who rate their status as “poor.”

Cognitive ability or state of being	Average number of CSAs by excellent/poor rating		Cognitive ability or state of being	Average number of CSAs by excellent/poor rating	
	Excellent	Poor		Excellent	Poor
Stress management	9.7	6.1	Ability to see patterns	9.5	6.9
Overall health	9.7	6.1	Wisdom	9.4	3.5
Purpose in life	9.7	6.2	Decision-making	9.4	6.3
Happiness	9.5	5.5	Memory (names, dates, grocery lists)	9.3	6.8
Brain health	9.6	5.2	Memory (recipes, medication, pay bills)	9.3	6.2
Ability to pay attention	9.6	6.9	Ability to plan trips, outings	9.3	6.8
Ability to learn new things	9.6	4.8	Spatial ability	9.2	6.4
Problem-solving skills	9.5	5.7	Ability to recognize correct change	8.8	8.2
Life satisfaction	9.5	5.4	Overall average	8.4	

Adults age 40+ who rate their cognitive abilities and states of being as “excellent” have significantly higher average mental well-being scores* than those who rate their abilities as “poor.”

Cognitive ability or state of being	Average mental well-being score by excellent/poor rating		Cognitive ability or state of being	Average mental well-being score by excellent/poor rating	
	Excellent	Poor		Excellent	Poor
Happiness	59.0	34.6	Ability to plan trips, outings	56.8	42.3
Stress management	58.8	38.3	Ability to learn new things	56.6	35.2
Life satisfaction	58.9	34.6	Wisdom	56.5	29.3
Overall health	58.2	36.1	Problem-solving skills	56.7	36.9
Brain health	57.9	37.0	Memory (recipes, medication, pay bills)	55.7	39.1
Purpose in life	57.9	36.4	Ability to see patterns	56.4	44.9
Ability to pay attention	57.3	39.4	Spatial ability	55.8	45.2
Memory (names, dates, grocery lists)	57.1	44.1	Ability to recognize correct change	54.3	44.6
Decision-making	56.9	37.7	Overall average	51.5	

*Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) © NHS Health Scotland, University of Warwick and University of Edinburgh, 2006, all rights reserved. Scale consists of 14-items and ranges from 14-70.

Engagement in Cognitively Stimulating Activities

Rationale: According to the Global Council on Brain Health (GCBH), cognitively stimulating activities (CSAs) are mentally engaging activities or exercises that challenge a person's ability to think. The quality of the activities (including novelty, variety, level of engagement, cognitive challenge imposed and degree of enjoyment) is important. Moreover, the duration of time in which you spend doing the activity plays an important role in the extent to which those activities will maintain or improve your brain function.

For the purpose of this analysis, CSAs were divided into six different groupings (see next page). CSAs engaged in weekly or more often were considered to be routine. Engagement in activities less frequently than weekly, such as once a month to only several times per year, were considered to be less beneficial to cognitive health and are not included in the summary analysis (as noted throughout). Each CSA was given equal weight; for example, working at a job was considered no more or less cognitively stimulating than learning to play a musical instrument. This is because there is no evidence that one activity is better for cognition than another activity. One primary focus of this analysis is the average number of different CSAs individuals participate in during the week.

Categories of Cognitively Stimulating Activities:

Musical or creative activities:

1. Cooking/preparing meals
2. Gardening
3. Working on hobbies (collecting, model building, juggling)
4. Engaging in creative or artistic activities (photography, painting as art, quilting)
5. Playing or learning a musical instrument
6. Singing or dancing with a group

Educational or learning activities:

1. Using the Internet to learn new things
2. Learning new technology
3. Teaching a new skill to others
4. Taking educational classes
5. Learning a new language
6. Learning things in public lectures/forums

Games or puzzles:

1. Challenging the mind with games or puzzles
2. Playing online or computer-based games, not designed for brain training
3. Playing online or computer-based brain-training games
4. Playing board games or cards

Other cognitively stimulating activities:

1. Watching the news
2. Reading
3. Working a full- or part-time job
4. Budgeting and paying bills (checkbook, expense planning)
5. Community volunteering
6. Documenting family history (genealogy)
7. Seeing a movie not meant for broad appeal (foreign language film, independent film)
8. Attending cultural events (concerts, museums, plays)

Religious or spiritual activities:

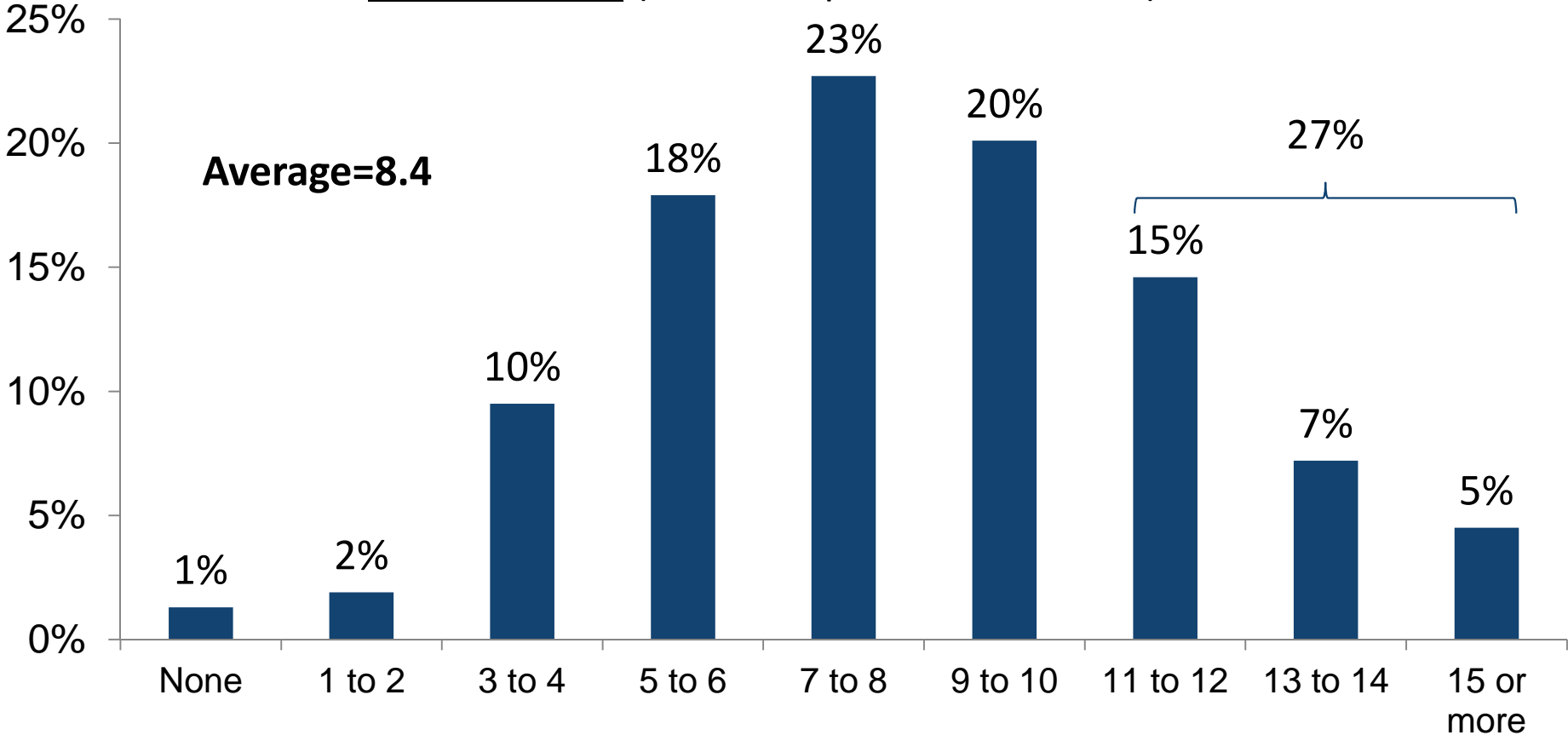
1. Praying in private
2. Attending religious services
3. Meditating in private
4. Meditating in a group, not associated with religion (mindfulness meditation)

Other brain-healthy behaviors:

1. Exercising or engaging in physical activity
2. Socializing with friends/family
3. Engaging in yoga
4. Engaging in Tai Chi

Over one-quarter of adults age 40+ engage in more than ten different cognitively-stimulating or other brain-healthy activities at least weekly.

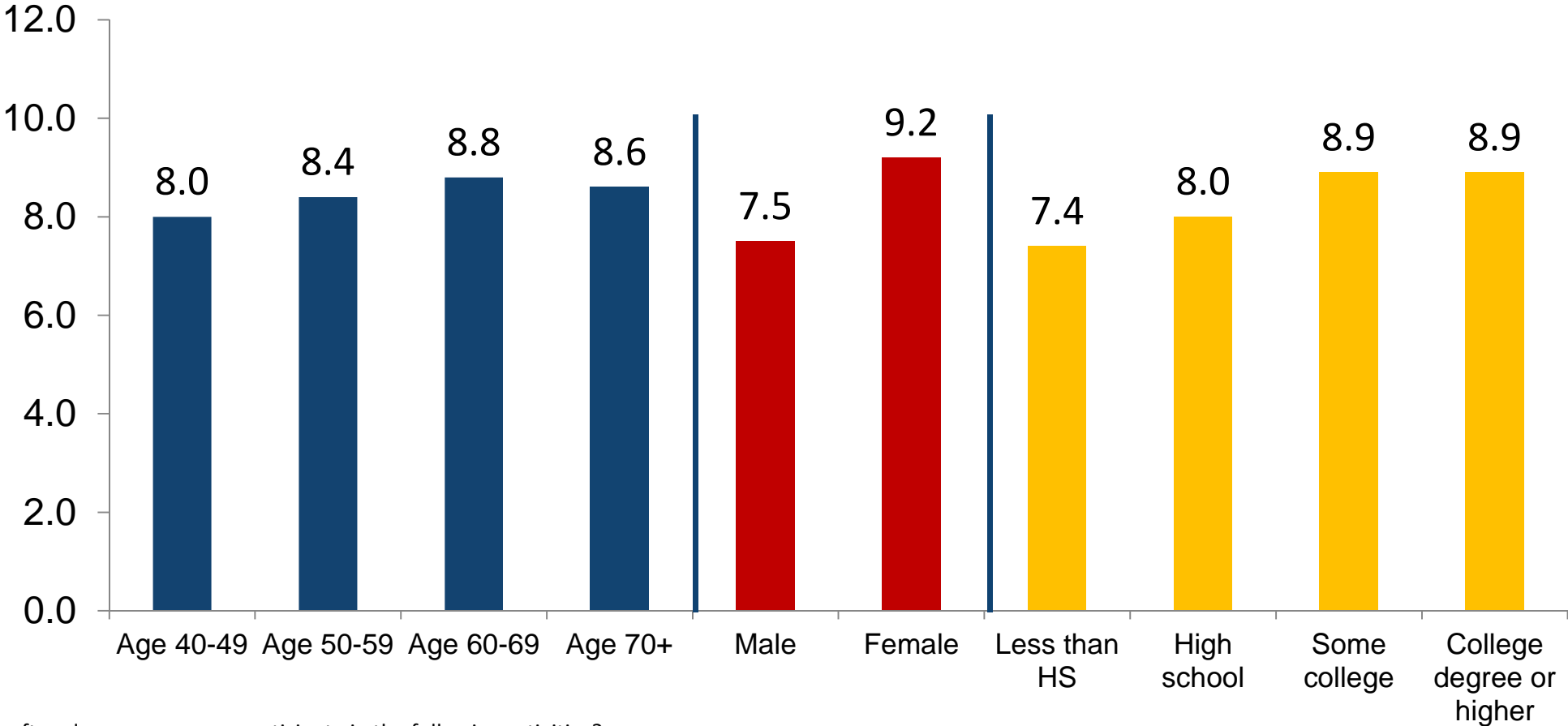
Total number of cognitively-stimulating activities engaged in weekly or more often (out of 32 possible activities)



How often do you engage or participate in the following activities?

Adults age 50 and over, women, and those with more education tend to engage in more cognitively-stimulating activities.

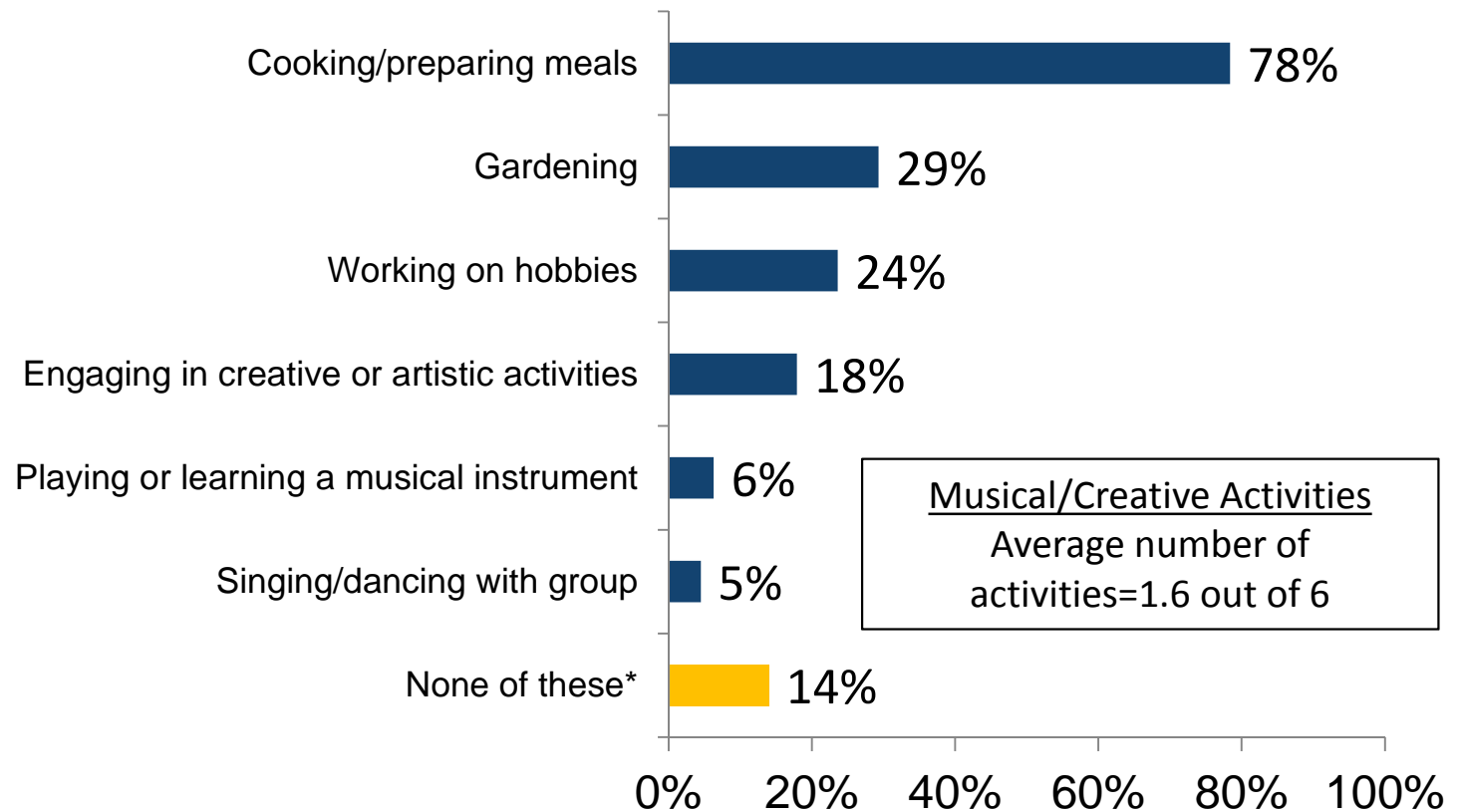
Average number of cognitively-stimulating activities engaged in weekly or more often by age, gender, and education



How often do you engage or participate in the following activities?

Many adults age 40+ engage in musical or creative activities, especially cooking or preparing meals where nearly eight in 10 engage in at least once per week. Less than three in 10, however, engage in each of the other creative pursuits.

Percent who engage in musical or creative activities weekly or more often



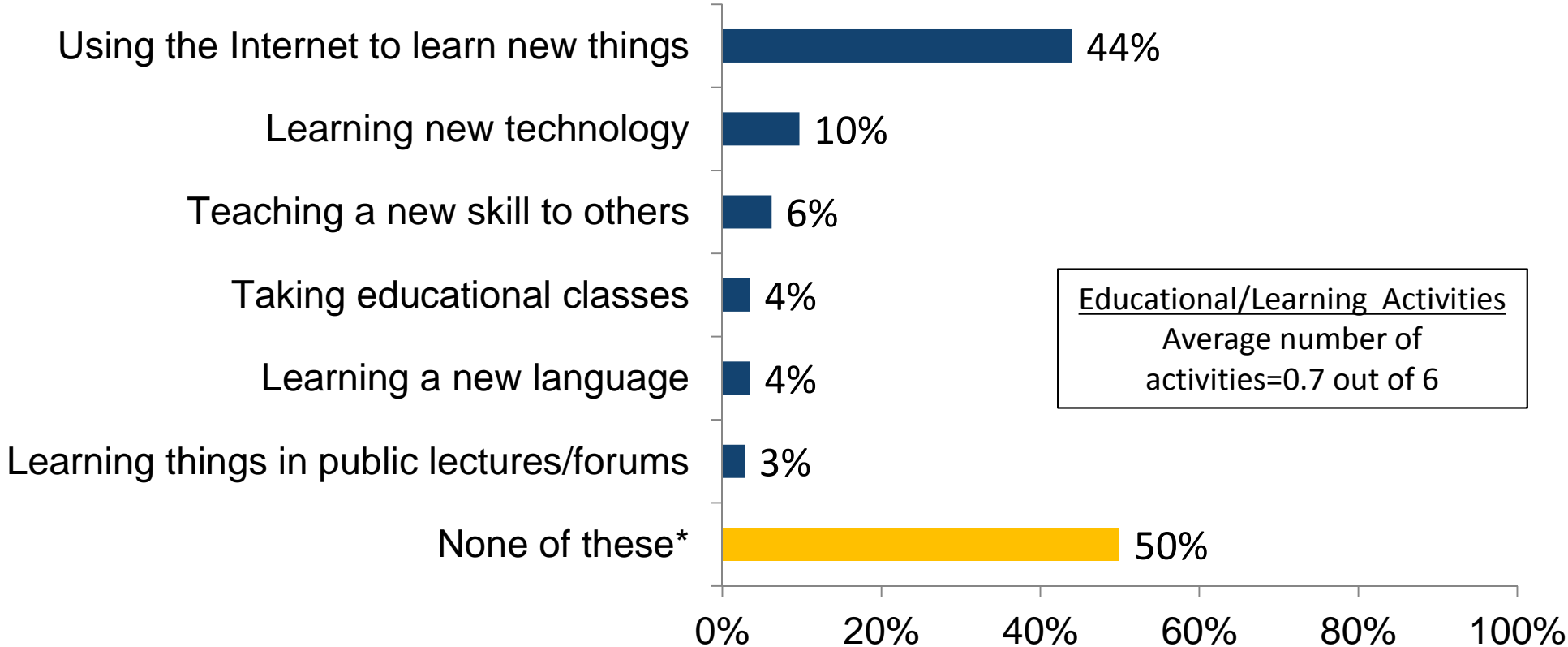
- Fewer African Americans/Blacks engage in gardening (17%) and creative/artistic pursuits (11%).
- Fewer Hispanics/Latinos engage in hobbies (15%).

*Percent who do not engage in any of these activities weekly or more often.

How often do you engage or participate in the following activities?

The most frequent educational or learning activity engaged in weekly or more often is using the Internet to learn new things, such as researching an issue or watching an instructional video.

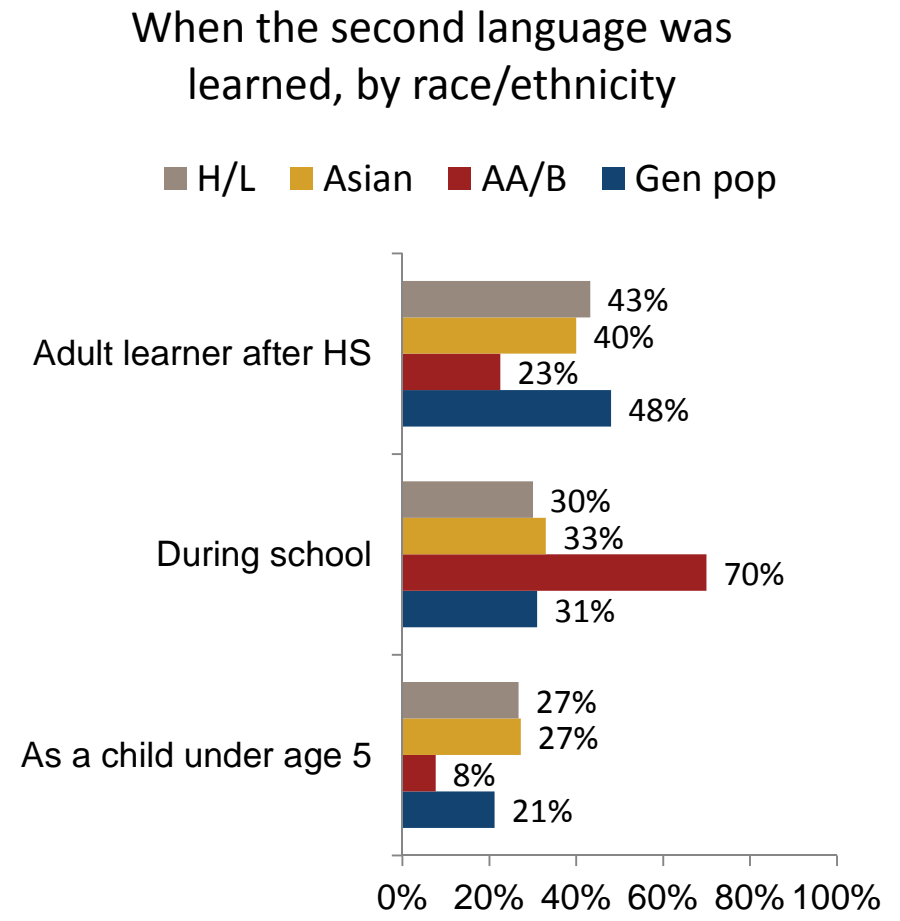
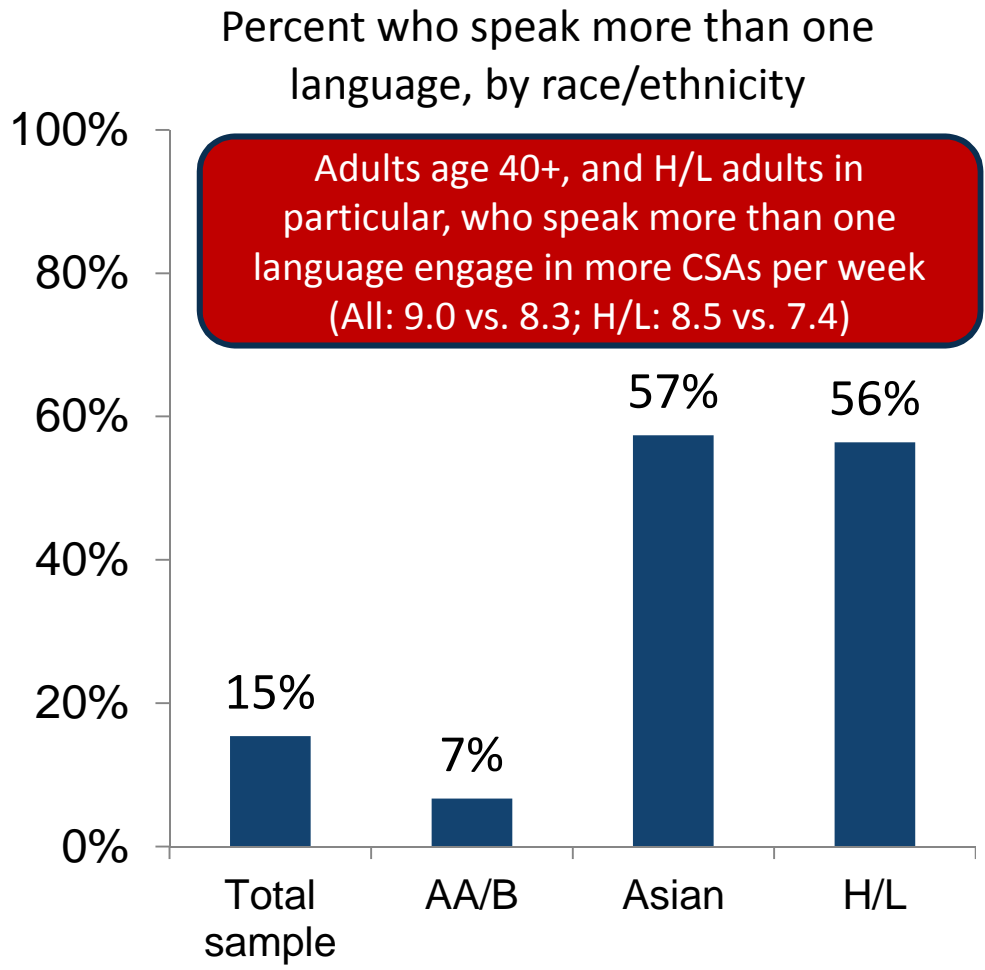
Percent who engage in educational or learning activities weekly or more often



*Percent who do not engage in any of these activities weekly or more often.

How often do you engage or participate in the following activities?

Most bilingual adults are Hispanic/Latino or Asian and about four in 10 learned to speak their second language as an adult learner, likely English as a second language. Interestingly, among the African American/Black adults who speak a second language, seven in 10 learned in school.

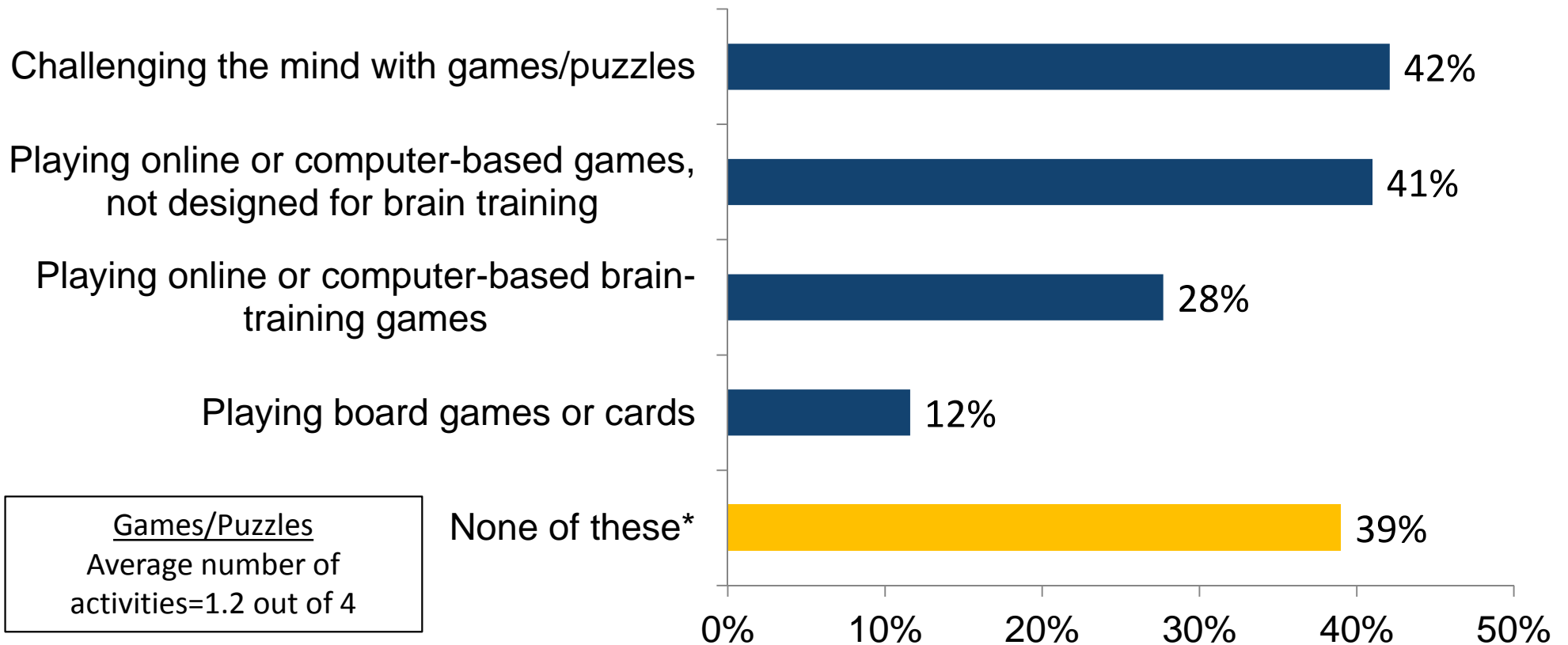


Do you speak more than one language? Yes/no

When did you become fluent in the second language?

Just under three in 10 (28%) adults age 40+ play computer-based games designed for brain training on a regular basis.

Percent who engage in games or puzzles weekly or more often



*Percent who do not engage in any of these activities weekly or more often.

How often do you engage or participate in the following activities?

Significantly more adults age 40+ who regularly challenge the mind with games/puzzles or play online brain-training games rate their brain health as “excellent” or “very good.” The proportion of adults who engage in these activities varies significantly by age.

Challenging the mind with games/puzzles

Those who engage weekly or more often are more likely to rate their brain health “excellent” or “very good” (67% vs. 57%).

Older adults are significantly more likely to challenge the mind with games/puzzles compared to younger adults (% who engage weekly or more):

- Age 40-49 – 30%
- Age 50-59 – 39%
- Age 60-69 – 47%
- Age 70+ – 54%

Playing online or computer-based brain-training games

Those who engage weekly or more often are more likely to rate their brain health “excellent” or “very good” (68% vs. 58%).

Adults age 50-69 are significantly more likely to play online brain-training games (% who engage weekly or more):

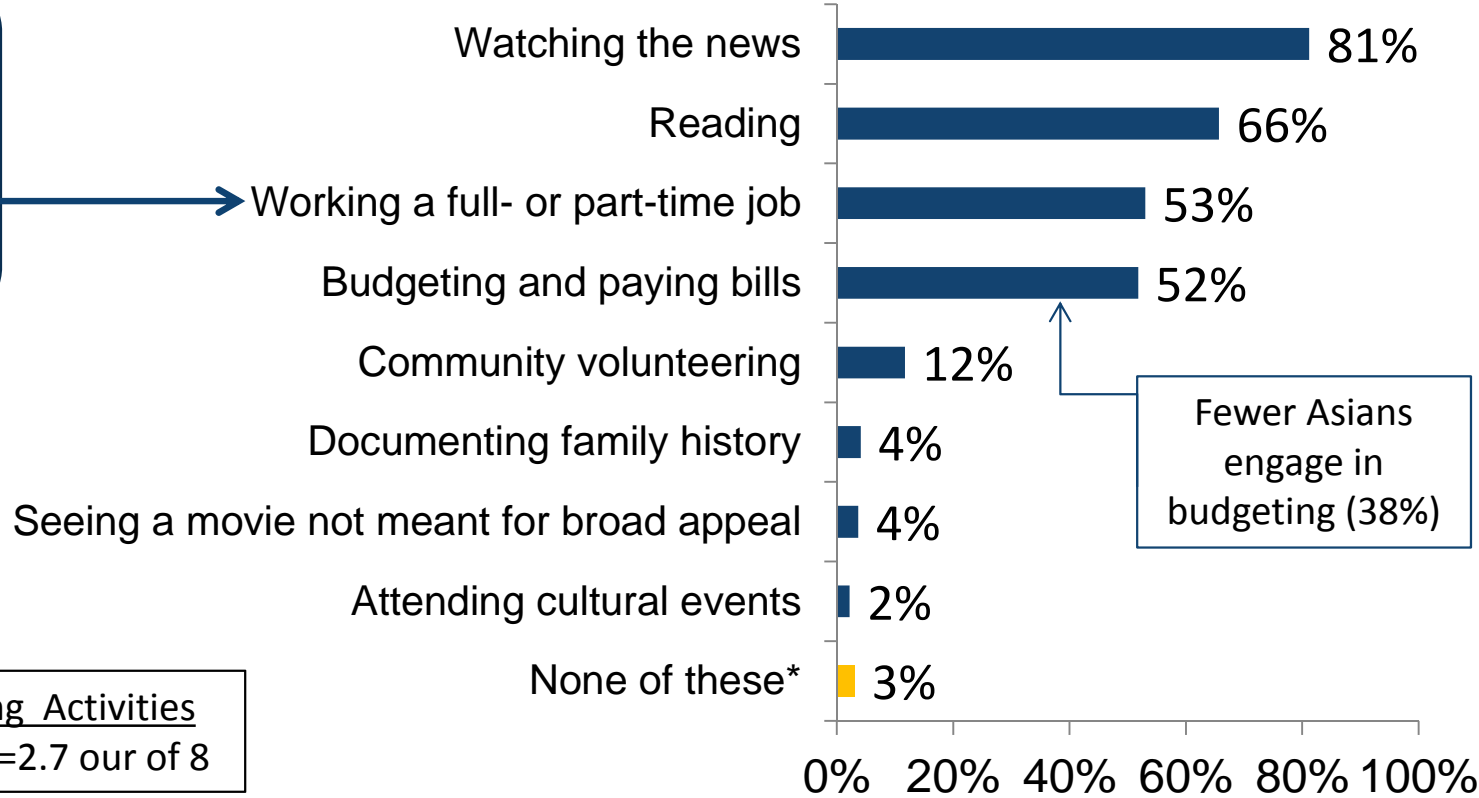
- Age 40-49 – 22%
- Age 50-59 – 31%
- Age 60-69 – 31%
- Age 70+ – 25%

How often do you engage or participate in the following activities?

A large majority of adults age 40+ watch the news at least once per week and two-thirds read. Few adults regularly attend cultural events, watch movies that are not meant for broad appeal, or document their family history.

Percent who engage in other cognitively stimulating activities weekly or more often

Three-quarters of those who work say it is mentally stimulating.



Other Cognitively Stimulating Activities
Average number of activities=2.7 out of 8

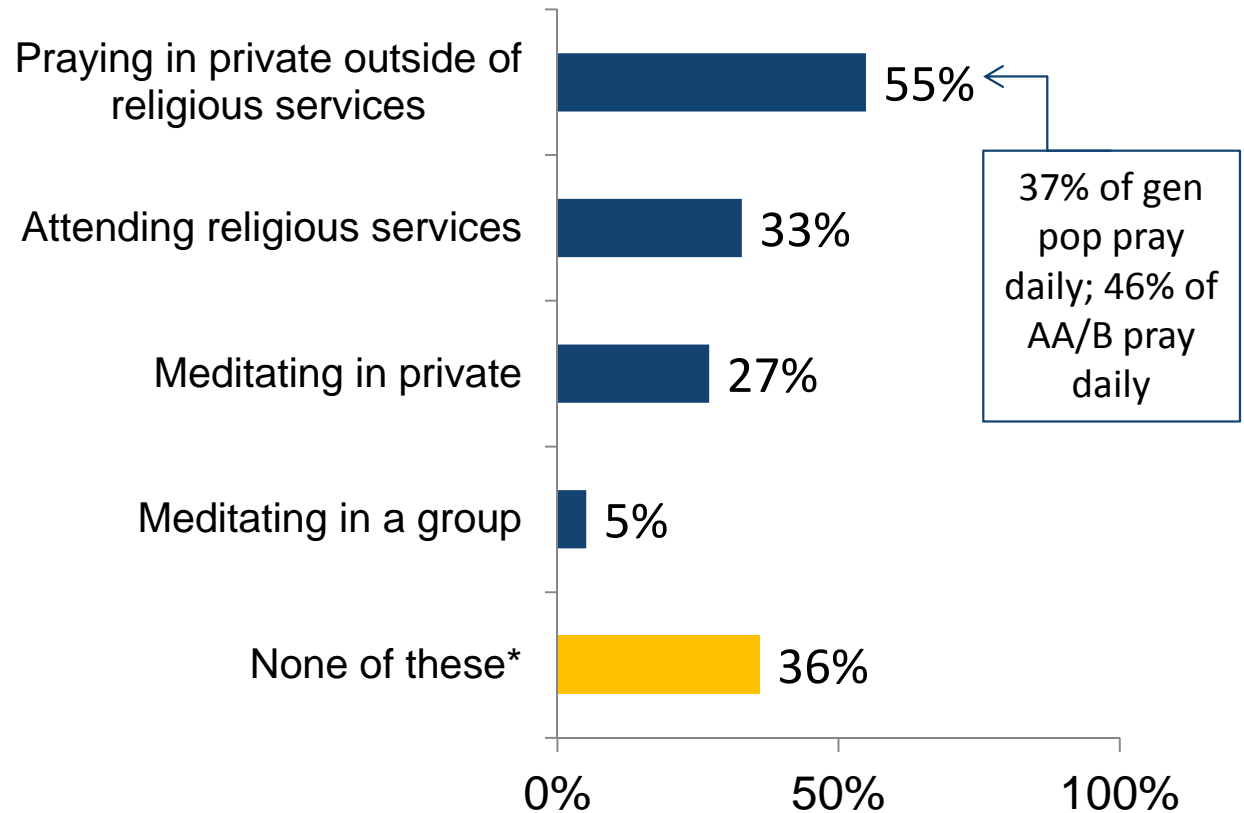
*Percent who do not engage in any of these activities weekly or more often.
How often do you engage or participate in the following activities?

Adults age 40+ are more likely to meditate in private than in a group and many pray in private. Significantly more African Americans/Blacks pray in private and attend religious services compared to the general population of adults age 40+; significantly fewer Asians engage in these activities compared to the general population.

Percent who engage in religious or spiritual activities weekly or more often

Activity	% who engage weekly or more, by race/ethnicity	
	AA/B	Asian
Praying	71%	33%
Attending services	42%	23%

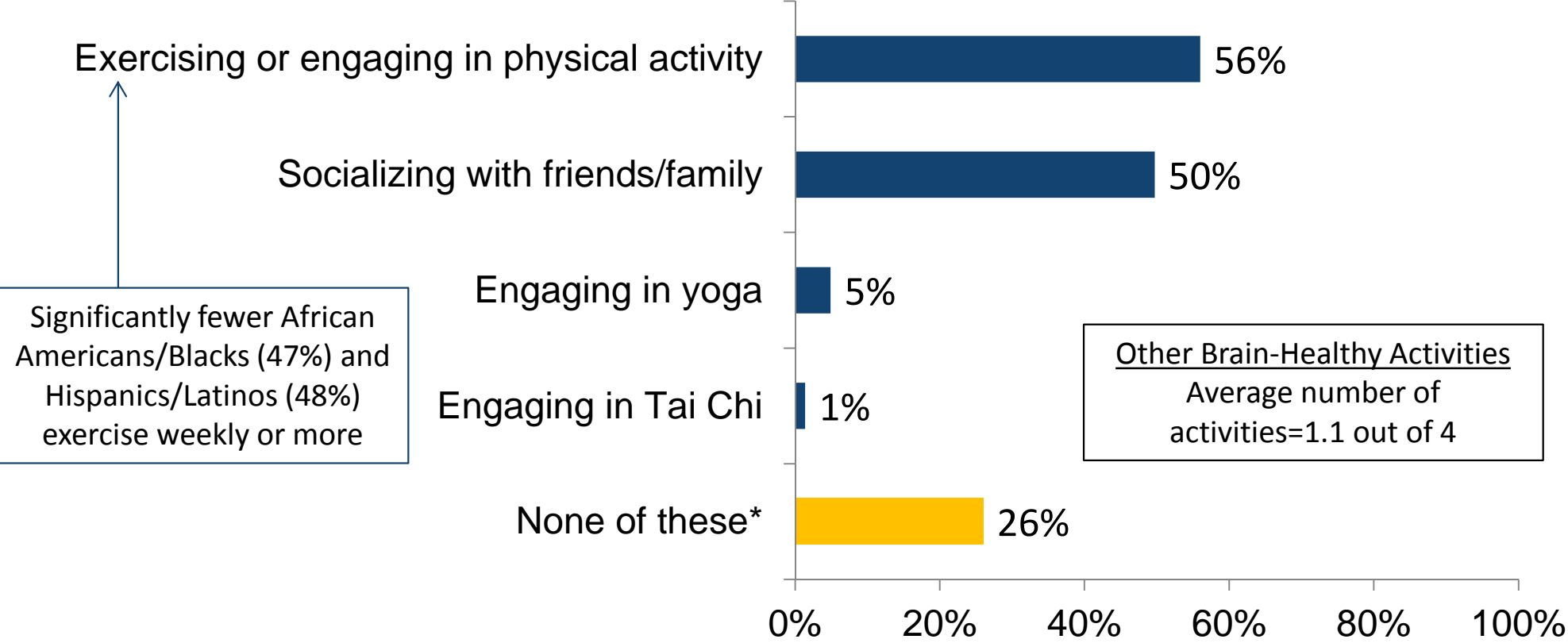
Religious or Spiritual Activities
Average number of activities=1.2 out of 4



*Percent who do not engage in any of these activities weekly or more often.
How often do you engage or participate in the following activities?

Very few adults age 40+ participate in yoga or Tai Chi on a weekly basis. Over half, however, engage in other physical activity and half regularly socialize with others.

Percent who engage in other brain-healthy behaviors weekly or more often

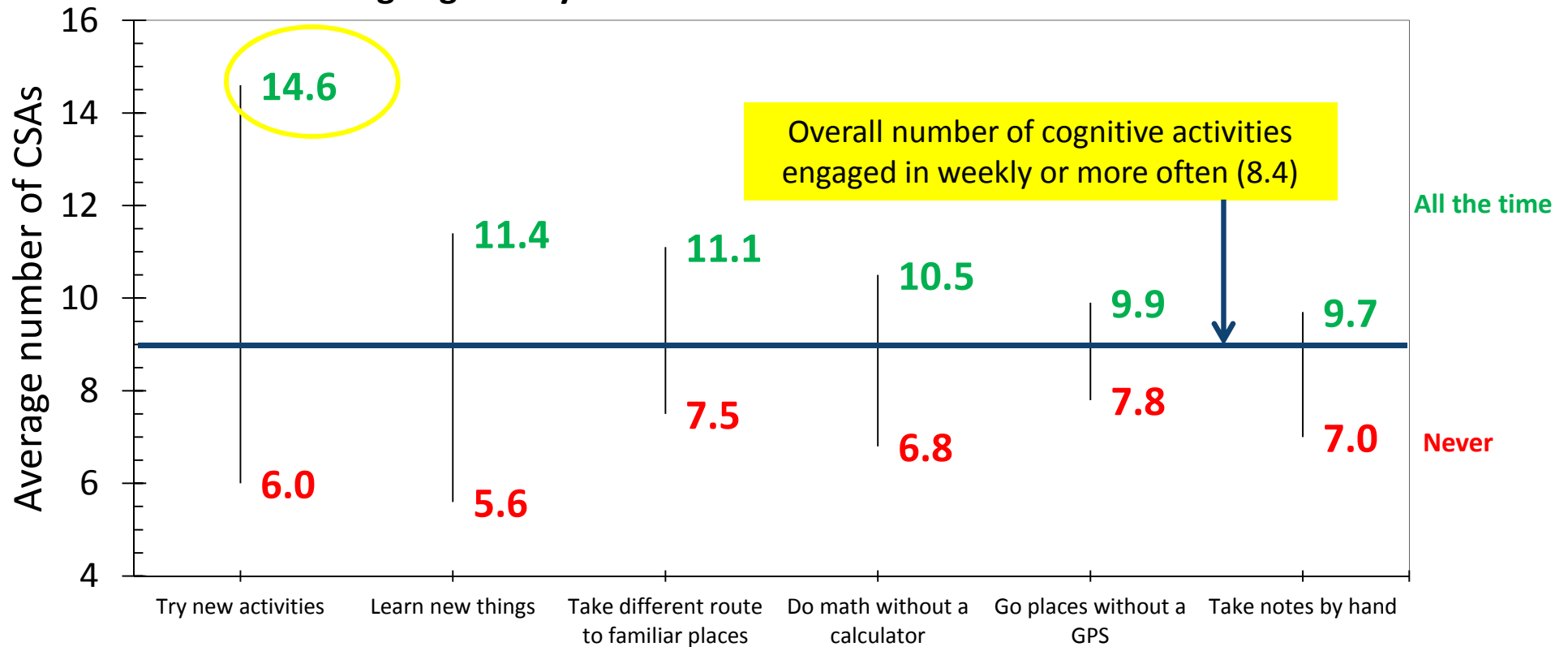


*Percent who do not engage in any of these activities weekly or more often.
How often do you engage or participate in the following activities?

Engagement in Other Cognitively-Beneficial Behaviors

Adults age 40+ who say they try new activities “all of the time” engage in six more cognitively-stimulating activities per week than the overall average and eight more than those who “never” try new things.

Average number of cognitively stimulating activities for those engaging in the following cognitively-beneficial behaviors “all the time” and “never”



In a typical week, how often do you spend time on the following activities? Never, Not too often, Sometimes, Fairly often, All the time

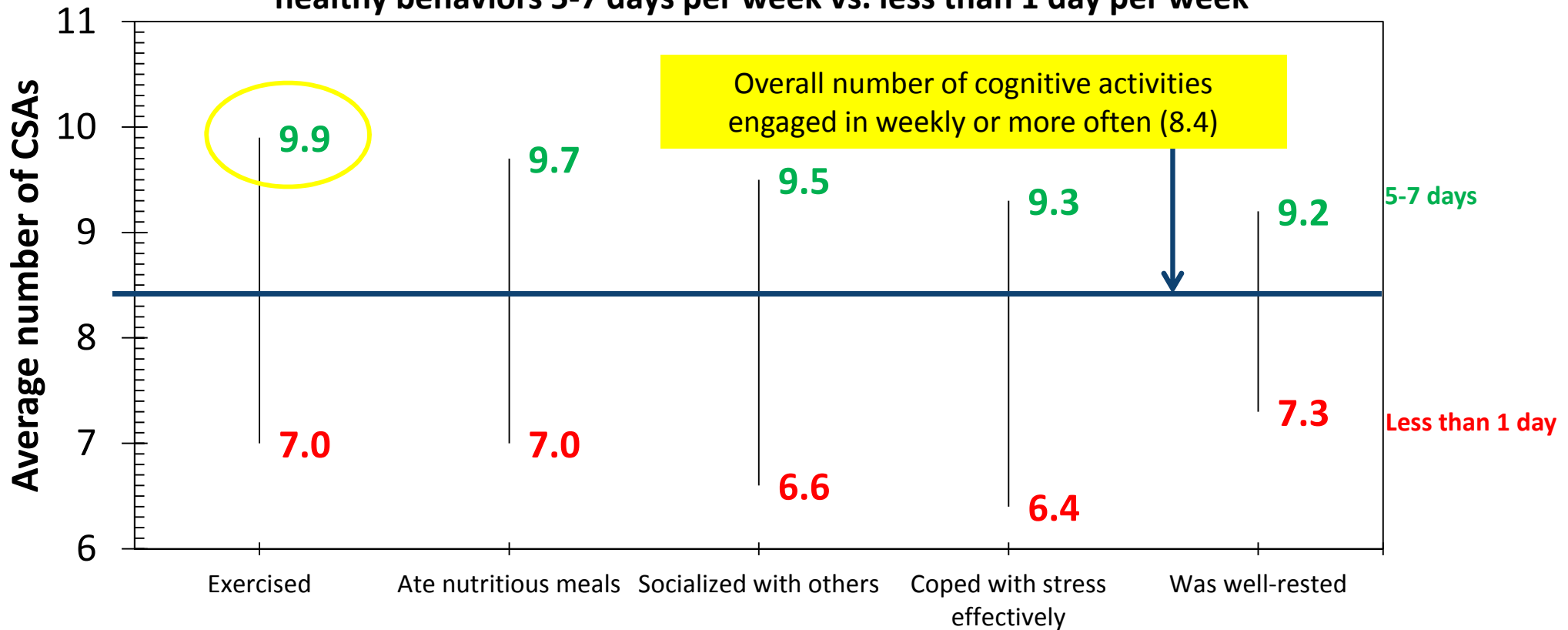
Adults age 40+ who rate their memory (ability to remember names, dates, grocery lists, etc.) and brain health as “excellent/very good” are significantly more likely to engage in activities that are good for their brain compared to those who rate their memory and brain health lower.

Activities in a typical week	Percent who engage “all the time” or “fairly often” by cognitive function			
	Memory (names, dates, grocery lists, etc.)		Brain Health	
	Excellent/very good	Good/fair/poor	Excellent/very good	Good/fair/poor
Writing by hand without a computer	50%	42%	49%	40%
Doing calculations by hand	45%	30%	43%	27%
Learning new things	31%	19%	30%	15%
Going to unfamiliar places without a GPS	19%*	16%*	20%	13%
Taking a different route	16%	11%	16%	9%
Trying new activities	13%	7%	13%	5%

*Not a statistically significant difference.

Adults age 40+ who engage in brain-healthy behaviors 5-7 days per week participate in significantly more cognitively-stimulating activities per week than those who engage less than one day per week.

Average number of cognitively stimulating activities for those engaging in brain-healthy behaviors 5-7 days per week vs. less than 1 day per week



Below is a list of ways you might have felt or behaved. Please tell me how often you have felt this way during the past week? Rarely or none of the time (less than 1 day), Some or a little of the time (1-2 days), Occasionally or a moderate amount of time (3-4 days), Most or all of the time (5-7 days).

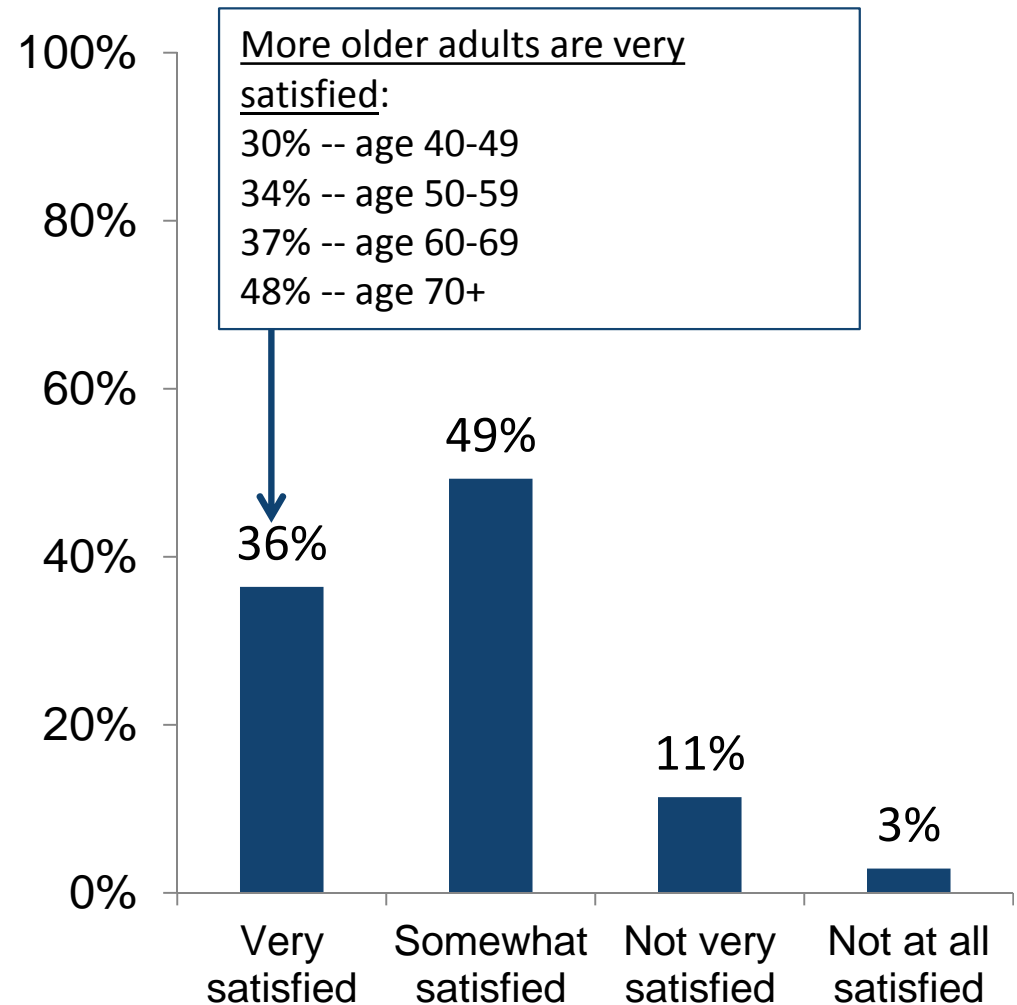
Adults age 40+ who rate their memory (ability to remember names, dates, grocery lists, etc.) and brain health as “excellent/very good” are significantly more likely to engage in brain-healthy behaviors compared to those who rate their memory and brain health lower.

During the past week...	Percent who engage most of the time (5-7 days) by cognitive function			
	Memory (names, dates, grocery lists, etc.)		Brain Health	
	Excellent/very good	Good/fair/poor	Excellent/very good	Good/fair/poor
Coped with stress effectively	57%	40%	58%	31%
Socialized with friends, family or others	53%	30%	48%	28%
Ate nutritious and well-balanced meals	46%	31%	45%	27%
Was well-rested	44%	25%	41%	22%
Exercised	23%*	18%*	24%	13%

*Not a statistically significant difference.

Just over one-third of adults age 40+ are “very satisfied” with the quality of their social relationships. Those who are “very satisfied” and have not felt isolated participate in significantly more cognitively stimulating activities and have much higher mental well-being scores.

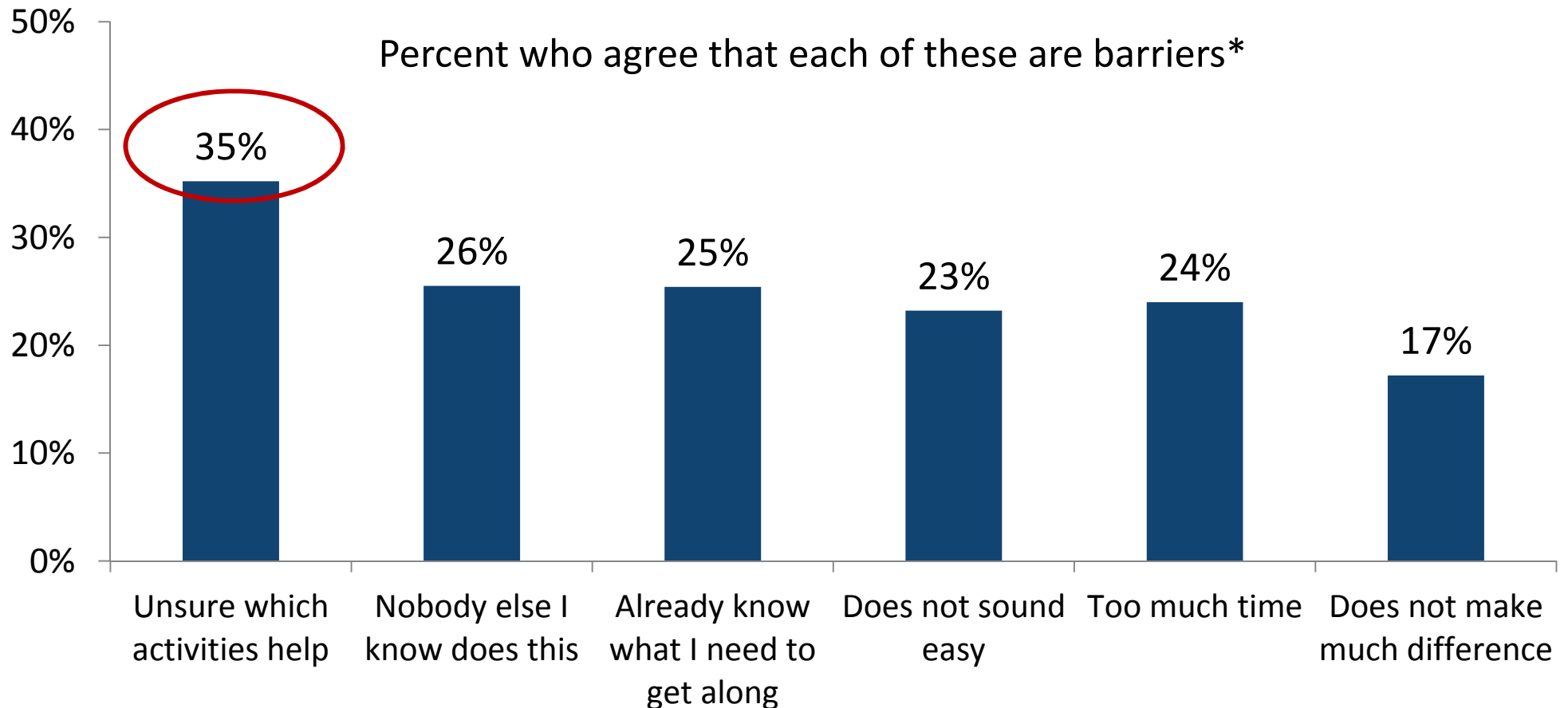
Satisfaction with social relationships	Average number of cognitively-stimulating activities	Average mental well-being score
Very	9.4	56.7
Somewhat	8.1	50.1
Not very	7.8	44.3
Not at all	5.5	39.1
Have you experienced a feeling of isolation in the last year?		
No	8.5	52.8
Yes	7.7	43.5
Average	8.4	51.5



In general, how satisfied are you with the quality of your social relationships?
 Have you experienced any of the following in the past year? A feeling of isolation

Willingness and confidence of adding more mentally-stimulating activities to weekly routine

The most common barrier to adding more mentally-stimulating activities is uncertainty about which activities will benefit brain health. Few believe it will not make a difference.



*Percent who answered 5,6, or 7 on a 7-point scale.

Please indicate whether you agree or disagree with the following possible reasons why it might be challenging for you to do more mentally-stimulating activities.

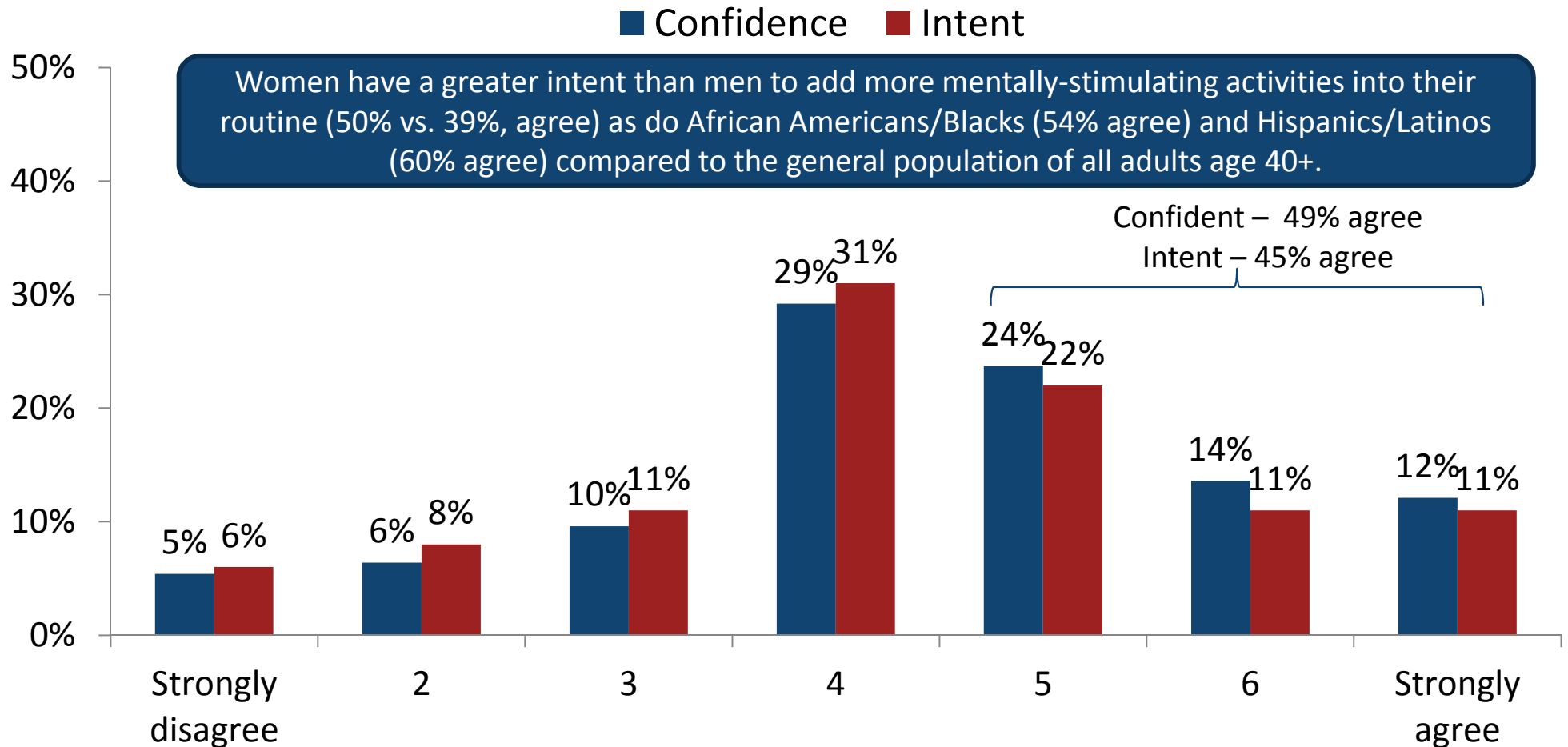
Many adults age 40+ see the benefit of adding mentally-stimulating activities to their routine. Significantly more women and Hispanics/Latinos see the benefits to all areas of health and well-being.

Adding more mentally-stimulating activities will benefit my:	% Agree*					
	Total sample	Men	Women	African American /Black	Asian	Hispanic /Latino
Brain health	67%	62%	71%	65%	75%	74%
Emotional well-being	54%	50%	58%	55%	55%	68%
Physical health	51%	46%	55%	59%	50%	65%
Social well-being	47%	42%	51%	53%	48%	65%

*Percent who answered 5,6, or 7 on a 7-point scale.

Please indicate whether you agree or disagree with the following statements: Adding more mentally-stimulating activities will benefit my: physical health, brain health, social well-being, emotional well-being

Yet, less than half (49%) of adults age 40+ say they are confident they can add more mentally-stimulating activities to their routine and 45% intend to do so. About three in 10 are neutral.



Please indicate whether you agree or disagree with the following statements: I am confident I can add more mentally-stimulating activities into my weekly routine
Please indicate whether you agree or disagree with the following statements: I intend to add more mentally-stimulating activities into my routine

A higher percentage of adults age 40+ who say they intend to add more mentally-stimulating activities to their weekly routine rate their cognitive functioning as “excellent/very good” compared to those who do not have this intention.

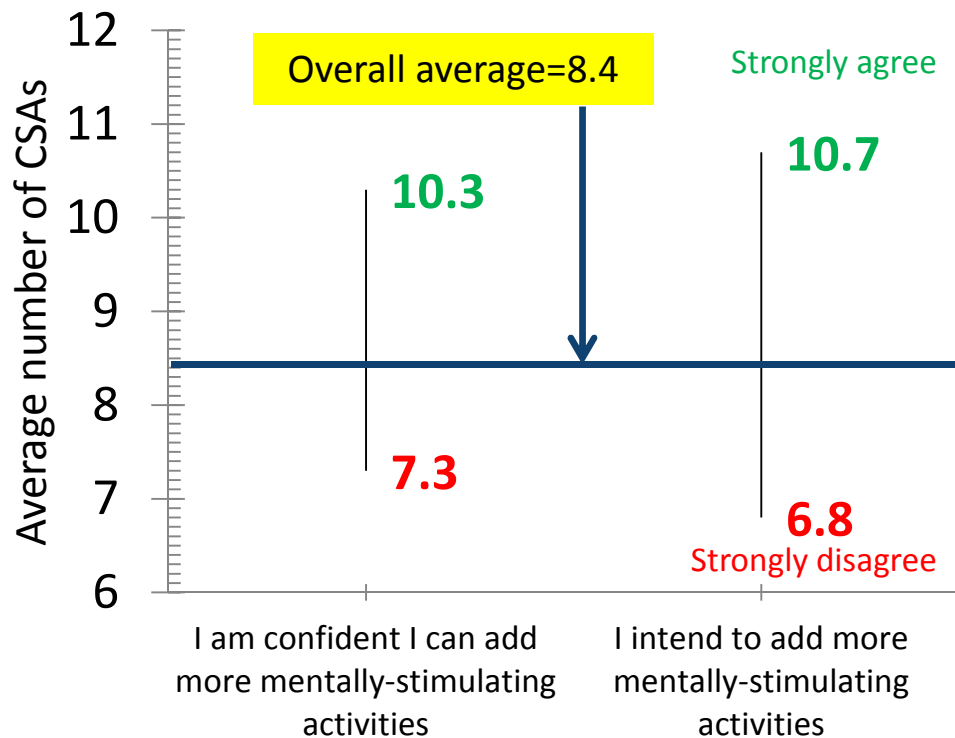
Cognitive function	Percent who say each cognitive function is “excellent/very good” by intention to add more mentally-stimulating activities			
	Total sample	Agree (5-7)	Neutral (4)	Disagree (1-3)
<u>Executive Function</u>				
Problem solving	67%	76%	62%	59%
Ability to plan	64%	74%	63%	52%
<u>Memory</u>				
Names, dates, grocery lists	44%	51%	44%	32%
Recipes, medication, bill paying	70%	78%	69%	62%
<u>Processing Speed</u>				
Decision making	68%	77%	64%	61%
Recognizing correct change*	81%	83%	82%	77%
Spatial Skills (map reading)	69%	76%	74%	56%
Reasoning (patterns)	67%	73%	69%	55%
Attention	64%	71%	65%	52%

* Not a statistically significant difference.

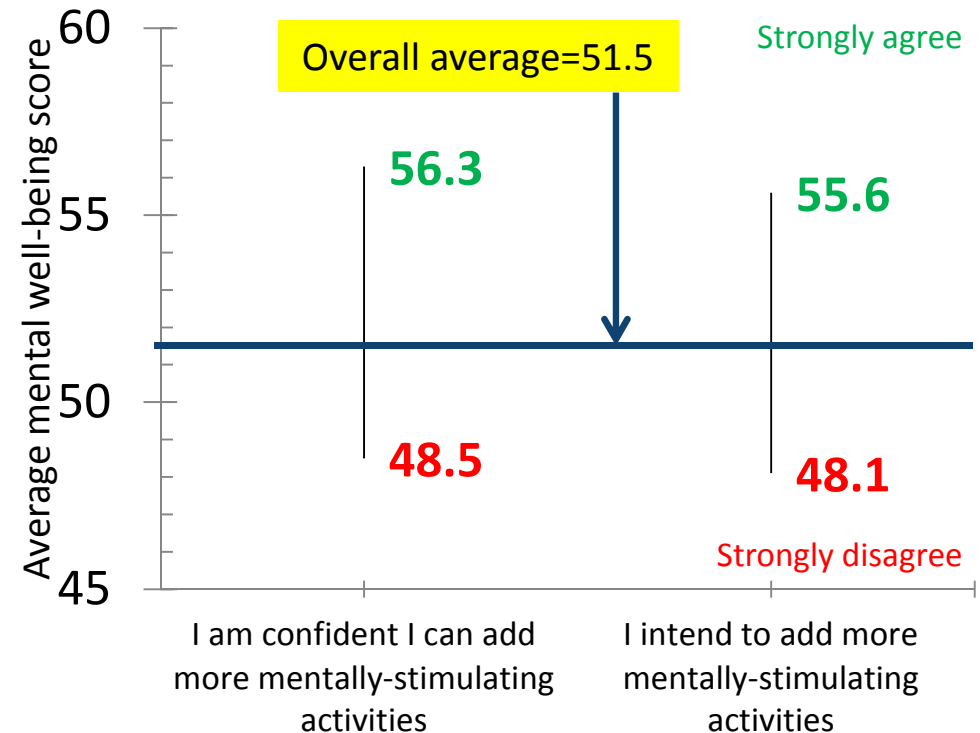
I intend to add more mentally-stimulating activities into my routine (scale of 1 (strongly disagree) to 7 (strongly agree))

Adults age 40+ who are more confident they can add mentally-stimulating activities into their regular weekly routine, already engage in more of these activities and have higher mental well-being scores than those who are less confident. A similar pattern was noted for those who intended to add more mentally-stimulating activities.

Average number of cognitively stimulating activities for those who strongly agree and strongly disagree



Average mental well-being scores for those who strongly agree and strongly disagree

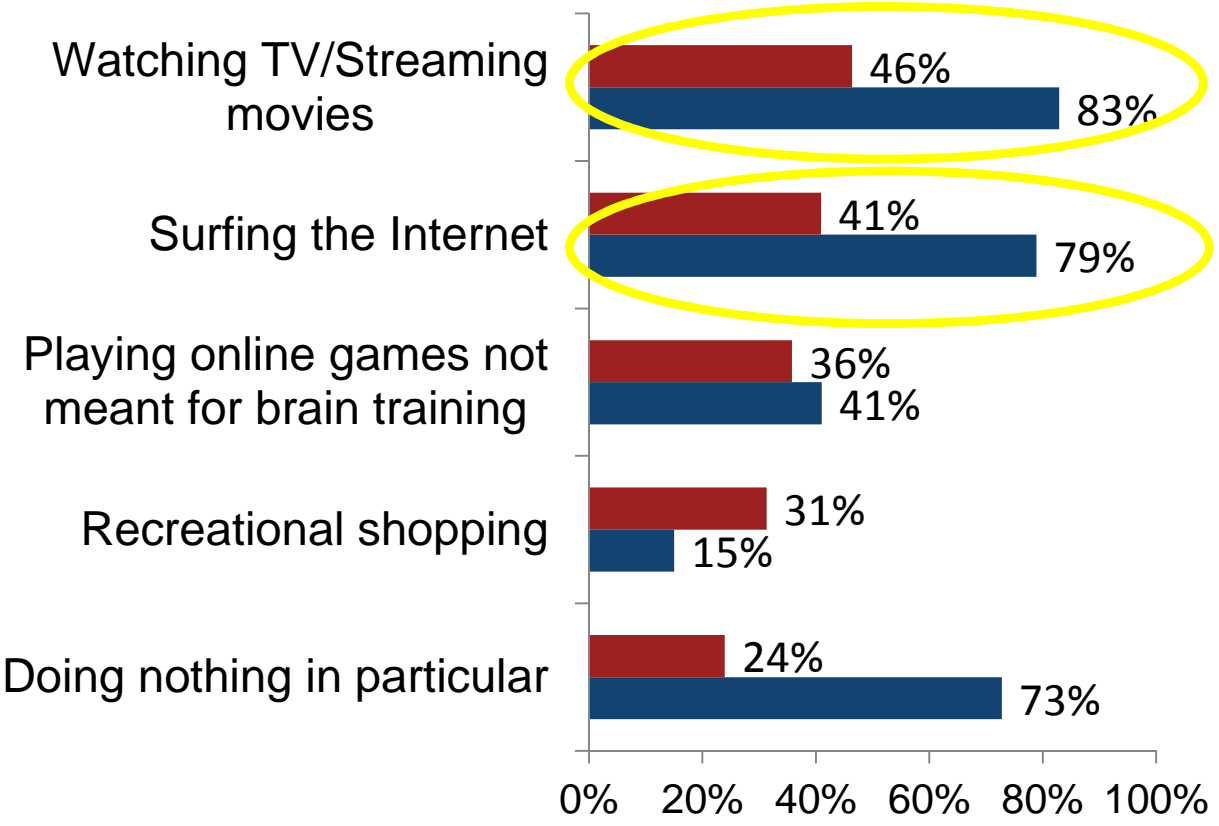


Please indicate whether you agree or disagree with the following statements: I am confident I can add more mentally-stimulating activities into my weekly routine
 Please indicate whether you agree or disagree with the following statements: I intend to add more mentally-stimulating activities into my routine

Of the top five activities adults age 40+ are most willing to reduce to add more mentally-stimulating activities, watching TV or streaming movies tops the list. Relatively fewer say they are willing to spend less time “doing nothing in particular.” It should be noted, however, that any of these activities could be considered mentally stimulating.

■ Willing to do less ■ Engage weekly or more

Younger adults age 40-49 compared to those 70+ (16% vs. 26%), men (19% vs. 28%), and African Americans/Blacks (16%) are less inclined to sacrifice time spent doing nothing in particular in order to add more mentally-stimulating activities.

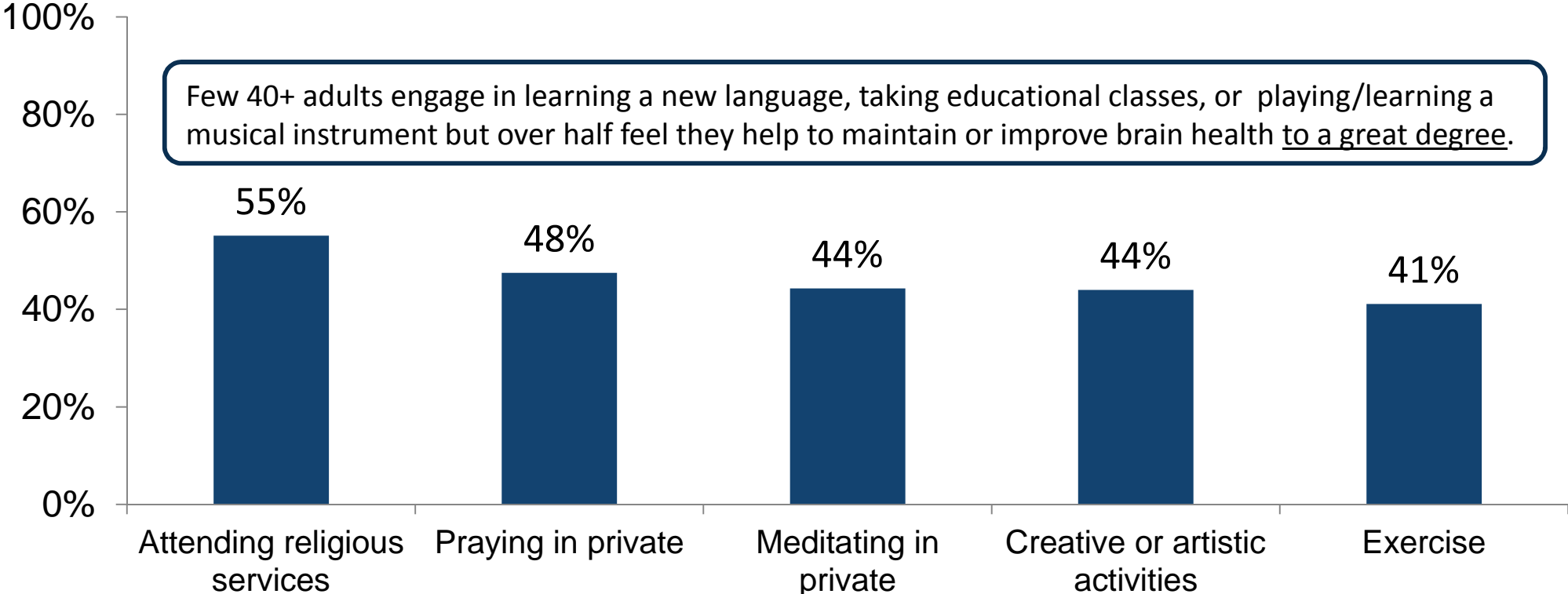


Whether or not it is likely, suppose you were to devote more time to mentally-stimulating activities. Of the following activities that you said you do at least once in a while, which of the following would you consider spending less time doing so you can spend more time doing mentally-stimulating activities?

Perceptions of brain health benefits of cognitively stimulating activities

Adults age 40+ who regularly engage in CSAs believe that attending religious services offers the greatest brain health benefit. About four in 10 recognize that exercising your body also benefits the brain “to a great degree.”

Top five activities that help maintain or improve brain health
“to a great degree”*



*Among those activities where at least 100 respondents engage in the activity weekly or more.

Thinking about the following activities that you do at least once in a while, how much do you think these activities have helped you to maintain or improve your brain health? To a great degree, To some degree, To a little degree, To no degree at all

Wide variation exists by race/ethnicity in the activities adults age 40+ believe help maintain or improve brain health. However, all races/ethnicities believe attending religious services and meditation helps “to a great degree.”

One-quarter (24%) of the general population and about four in 10 AA/B (40%), Asian (43%), and H/L (42%) adults said online games meant for brain training help to improve or maintain brain health to “a great degree.” Little scientific evidence supports this view.

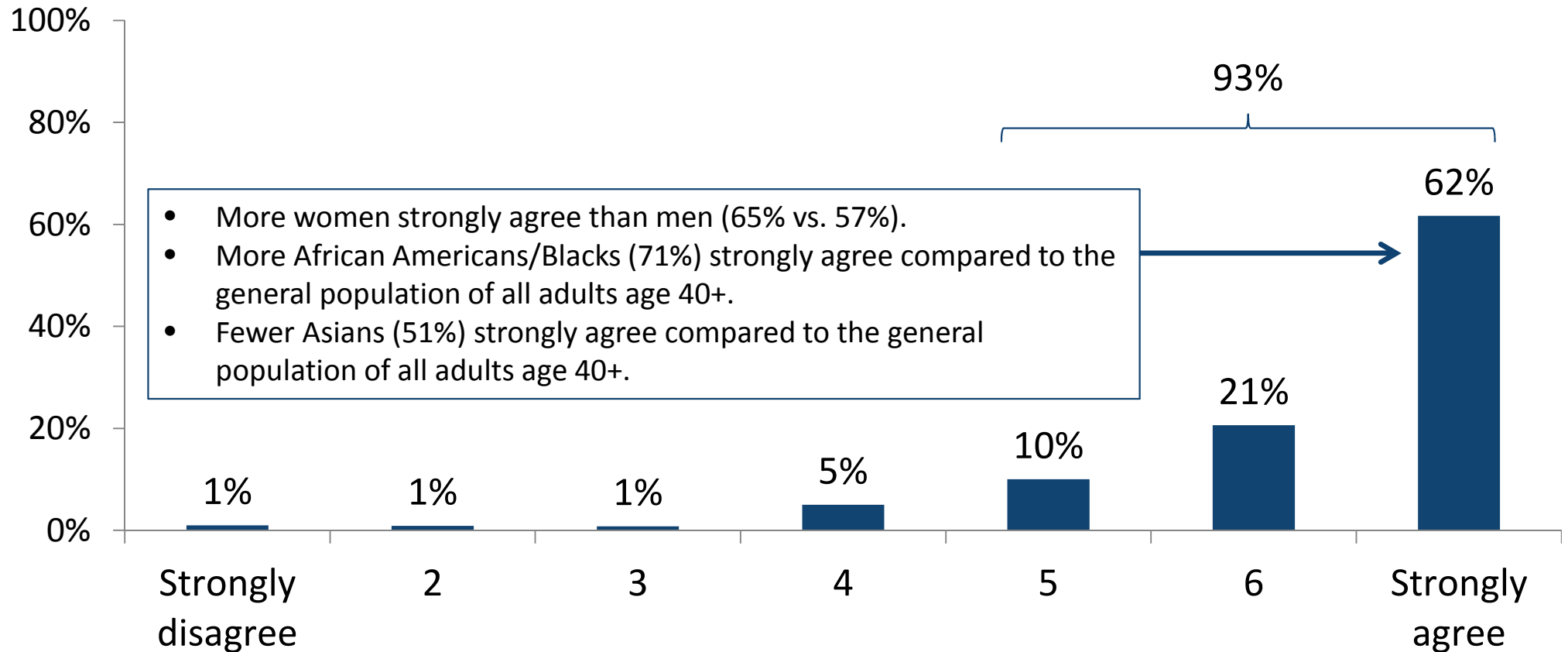
**Top five activities that help maintain or improve brain health, by race/ethnicity
(percent who answered “to a great degree”)**

General population (age 40+)	African American/Black	Asian	Hispanic/Latino
Attending religious services (55%)	Attending religious services (66%)	Meditating in private (60%)	Attending religious services (58%)
Praying in private (48%)	Praying in private (61%)	Socializing (51%)	Praying in private (58%)
Meditating in private (44%)	Gardening (54%)	Challenging the mind with games or puzzles (43%)	Meditating in private (55%)
Creative or artistic activities (44%)	Working at a job (51%)	Attending religious services (43%)	Challenging the mind with games or puzzles (54%)
Exercise (41%)	Meditating in private (50%)	Online games meant for brain training (43%)	Gardening (49%) Exercise (49%)

Cognitive Training

A series of specific activities designed to improve a specific cognitive ability such as reasoning, attention, memory, language, and spatial skills. This type of training involves the repetition of specific tasks, and the progression to increasingly challenging tasks, throughout the training program.

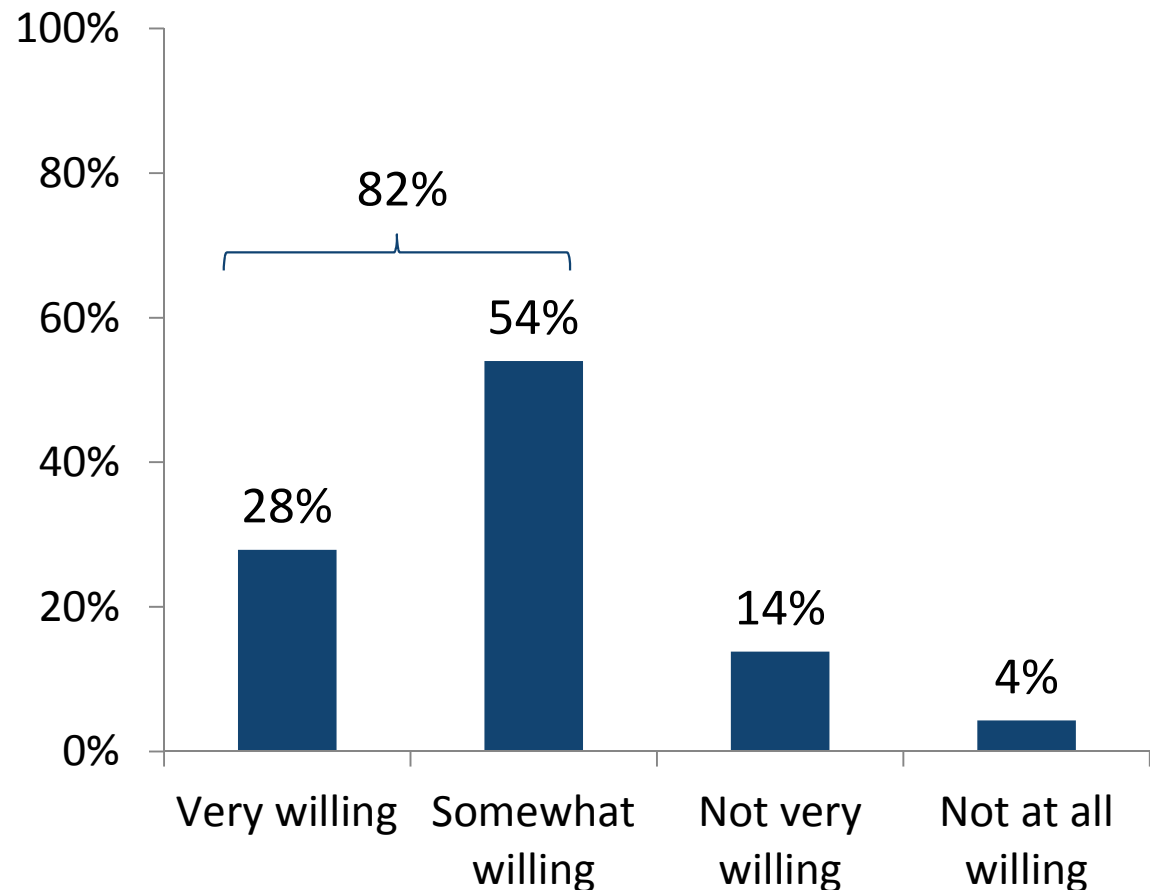
Nearly all adults age 40+ agree that you can learn something new at any age. Significantly more women and African Americans/Blacks strongly agree.



Using the scale below, do you agree or disagree that someone can learn something new at any age?

Most adults would want to improve their cognitive ability if given the opportunity. More than eight in 10 (82%) adults age 40+ would be willing to participate in cognitive training. Women, adults under age 60, and those who are working are more inclined to engage in cognitive training.

Willingness to engage in cognitive training	
Characteristic	% Willing
Women	85%
Men	78%
Age 40-49	85%
Age 50-59	84%
Age 60-69	80%
Age 70+	78%
Working	84%
Retired	78%



If you wanted to improve in a specific area related to your cognitive ability, how willing would you be to participate in cognitive training?

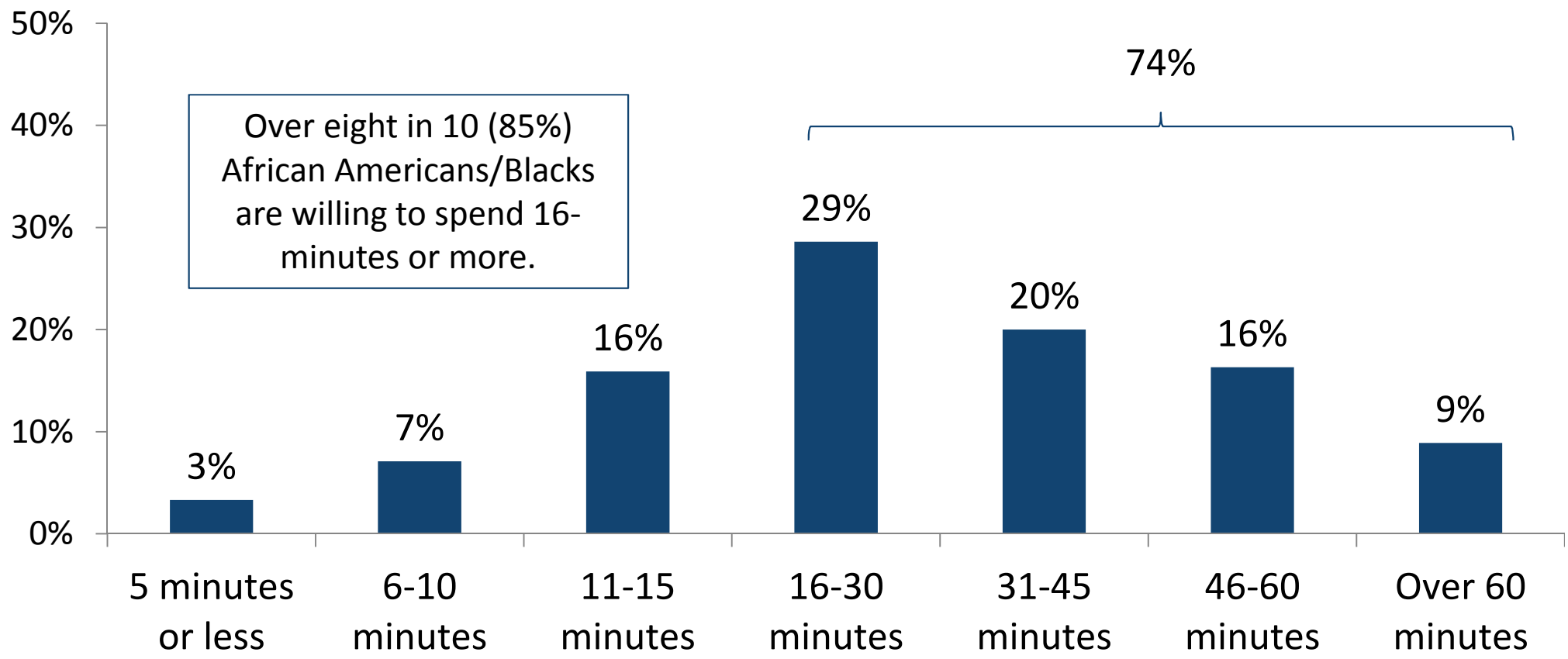
A higher percentage of adults age 40+ who say they are very willing to engage in cognitive training rate their cognitive functioning as “excellent/very good” compared to those who are less willing to engage in the training.

Cognitive function	Percent who say each cognitive function is “excellent/very good” by willingness to engage in cognitive training			
	Total sample	Very willing	Somewhat willing	Not willing
<u>Executive Function</u>				
Problem solving	67%	77%	67%	58%
Ability to plan	64%	72%	66%	49%
<u>Memory</u>				
Names, dates, grocery lists*	44%	47%	43%	39%
Recipes, medication, bill paying	70%	77%	71%	59%
<u>Processing Speed</u>				
Decision making	68%	77%	67%	58%
Recognizing correct change	81%	83%	83%	75%
Spatial Skills (map reading)	69%	75%	68%	63%
Reasoning (patterns)	67%	75%	66%	57%
Attention	64%	70%	62%	57%

* Not a statistically significant different.

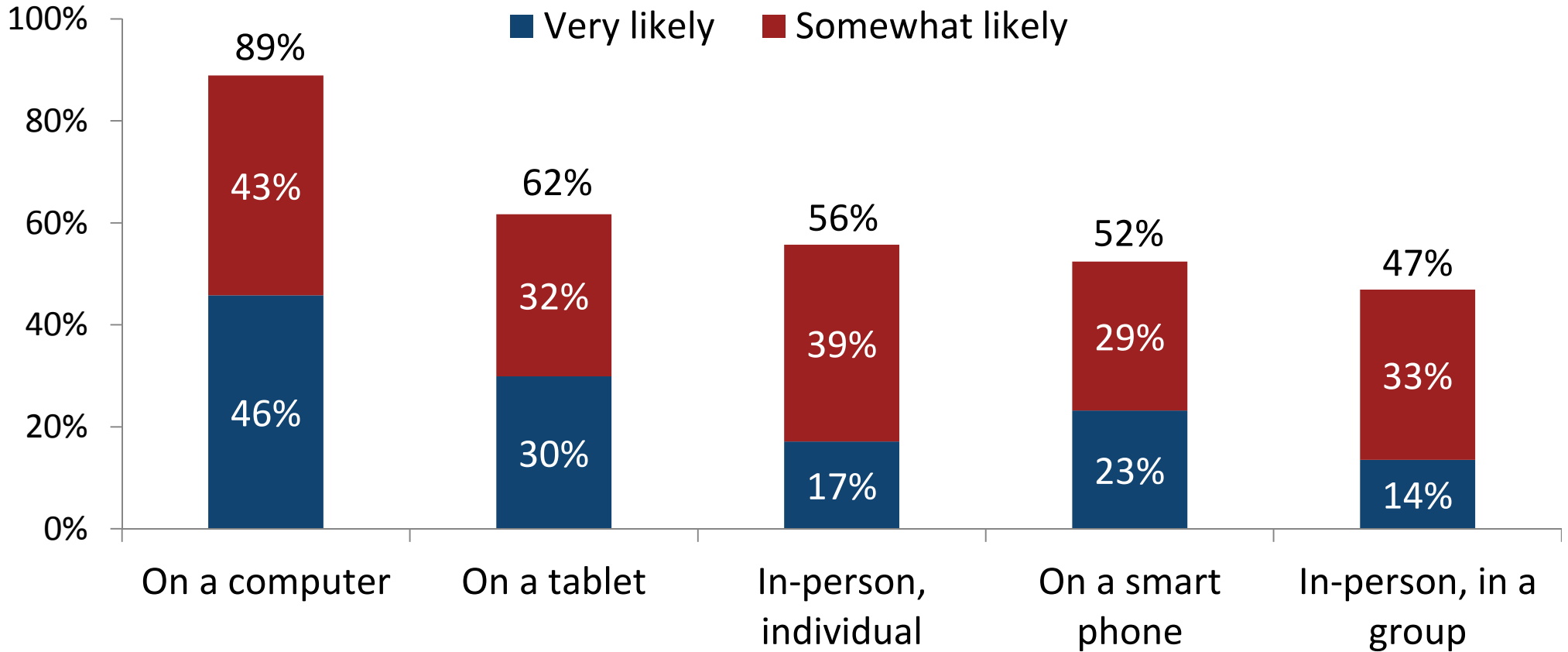
If you wanted to improve in a specific area related to your cognitive ability, how willing would you be to participate in cognitive training?

About three-quarters (74%) of adults age 40+ would be willing to spend 16-minutes or more per day on cognitive training over a 6-week period of time.



Please indicate the maximum amount of time you would be willing to spend per day in a 6-week period on cognitive training.

Nearly nine in 10 (89%) adults age 40+ would be at least somewhat likely to participate in cognitive training on a computer.



How likely would you be to engage in cognitive training in the following formats?

More adults age 70+ are likely to engage in cognitive training in-person. Significantly more African Americans/Blacks and Hispanics/Latinos compared to the general population (all adults age 40+) said they would be likely to engage in cognitive training in formats other than a computer.

Cognitive training setting	% very or somewhat likely, by age and race/ethnicity							
	Total sample	Age 40-49	Age 50-59	Age 60-69	Age 70+	African American/Black	Asian	Hispanic/Latino
On a computer	89%	89%	94%	89%	80%	91%	88%	88%
On a tablet	62%	76%	65%	57%	43%	72%	61%	74%
In-person, individual	56%	54%	54%	52%	65%	64%	59%	64%
On a smart phone	52%	76%	58%	39%	27%	61%	70%	70%
In-person, in a group	47%	42%	47%	41%	61%	59%	46%	56%

How likely would you be to engage in cognitive training in the following formats?