

Under Embargo Until July 17, 2024, 6 a.m. ET

# ▶ Video Gamer Safe Listening Poll

A collaboration of the American Speech-Language-Hearing Association, the World Health Organization, and WHO Collaborating Center for Rehabilitation in Global Health Systems at the University of Lucerne, Switzerland



ASHA



*Make Listening Safe*



YouGov®

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## Overview

The American Speech-Language-Hearing Association (ASHA), the World Health Organization (WHO), and WHO Collaborating Center for Rehabilitation in Global Health Systems at the University of Lucerne, Switzerland, collaborated on the polling covered by this report. Commissioned by ASHA and conducted by YouGov, the polling stems from WHO's *Make Listening Safe* campaign, for which ASHA serves in an advisory role. The three countries chosen for the poll are world leaders in video gaming activity.

Broadly, the polling results will be used to **a) increase public awareness of the threat of noise-induced hearing loss from unsafe listening practices while video gaming** and **b) inform the development of a new global standard for video gaming and esports** by better understanding video gamers' habits, preferences, and willingness to accept potential safety features.

## Background

ASHA has long advocated for hearing protection when using popular technology. The association sounded an early alarm in the mid-2000s about the risk of hearing loss due to unsafe listening practices as iPods and other MP3 players skyrocketed in popularity.

Eventually, ASHA became an advisor to WHO's *Make Listening Safe* campaign, which launched in 2015 and has a global focus on preventing noise-induced hearing loss in young adults. The campaign was prompted by concerns that **more than 1 billion young people (12–35 years old) worldwide are at risk of developing hearing loss from recreational exposure to loud sound.**

Primary sources of recreational noise exposure include spending time in noisy environments (e.g., concert venues, nightclubs) and listening to personal technology devices at high volumes for long periods of time.

To date, two new global standards have been developed under the *Make Listening Safe* umbrella—one for personal listening devices and one for entertainment venues. In 2023, WHO announced its intent to develop a new standard specific to video gaming and esports. **Video gaming and esports have surged in popularity, captivating up to 3 billion enthusiasts worldwide.** Video gamers and esports enthusiasts are at risk of hearing loss due to their high usage of personal audio devices.

## Objectives

The poll aimed to gather information from video gamers ages 18–35 about their hearing and listening habits and to obtain their reactions to WHO’s proposed safe listening guidance. Highlights include:

- hearing health and listening habits of video gamers
- behavior, frequency, and preferences while playing video games
- video gamer reactions to WHO’s proposed safe listening features
- demographics

## Methodology

10-minute online survey among 1,678 respondents ages 18–35 that play video, computer, or mobile games weekly.

- ***n* = 506 United States Video Gamers** aged 18–35 who play video, computer, or mobile games weekly
- ***n* = 524 Brazil Video Gamers** aged 18–35 who play video, computer, or mobile games weekly
- ***n* = 648 Japan Video Gamers** aged 18–35 who play video, computer, or mobile games weekly

Data were weighted on a country-by-country basis to ensure accurate representation of the country’s video gaming population (ages 18–35). Minimal weights were applied to age, gender, education\*, and region. It is important to note that cultural differences in gaming habits and in general social norms may impact results.

# Executive Summary

Polling reveals that younger adults (ages 18–35) who play video games are regularly putting their hearing at risk, and some are already experiencing hearing difficulties. If behaviors don't change, many video gamers could be on a course to hearing loss—which the majority say would significantly impact their quality of life. However, once informed of the potential for hearing loss, the majority of video gamers say they are likely to change their listening habits. Additionally, they are very receptive to proposed safe listening features for video game devices.

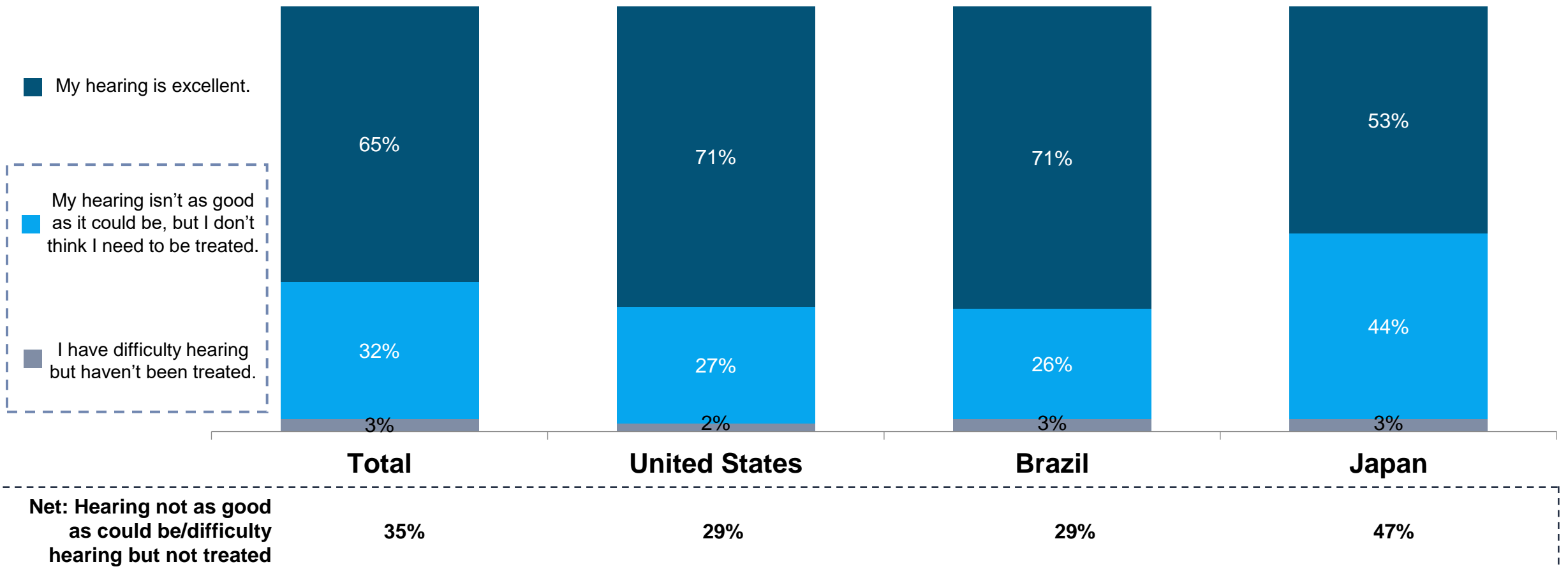
## Key findings include the following:

- More than three-quarters **regularly engage in activities that can be detrimental to hearing**, including 52% who use headphones for long periods or at loud volumes.
- Yet, the majority **believe their listening habits are fine the way they are**, both in terms of volume level (71%) and time spent listening (68%).
- Over one-third of **video gamers report hearing difficulties**. Among that group, one-quarter feel their video gaming habits have contributed to their hearing issues.
- Less than one-third of video gamers overall **feel they are at risk of hearing loss** from playing video games.
- **Preventing hearing difficulties is important** to most video gamers (87%).
- More than two-thirds say they are **likely to change their habits** after being informed about the potential for hearing loss from unsafe listening habits while video gaming.
- On average, about **15 hours per week is spent playing video games** across all countries. Americans spend the most time playing video games.
- The **features proposed by WHO to make listening safer are generally well received**, with the majority of video gamers reporting they would be likely to use them and few believing there would be a negative impact on their gaming experience.

# **Hearing Health and Attitudes Toward Hearing**

**Overall, nearly two-thirds of video gamers describe their hearing as excellent, although those in Japan are less likely to say this than those in the United States or Brazil.**

### Hearing Health



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648

G1. Which best describes your own hearing health? Note: Zero percent selected "I have difficulty hearing and have been treated."

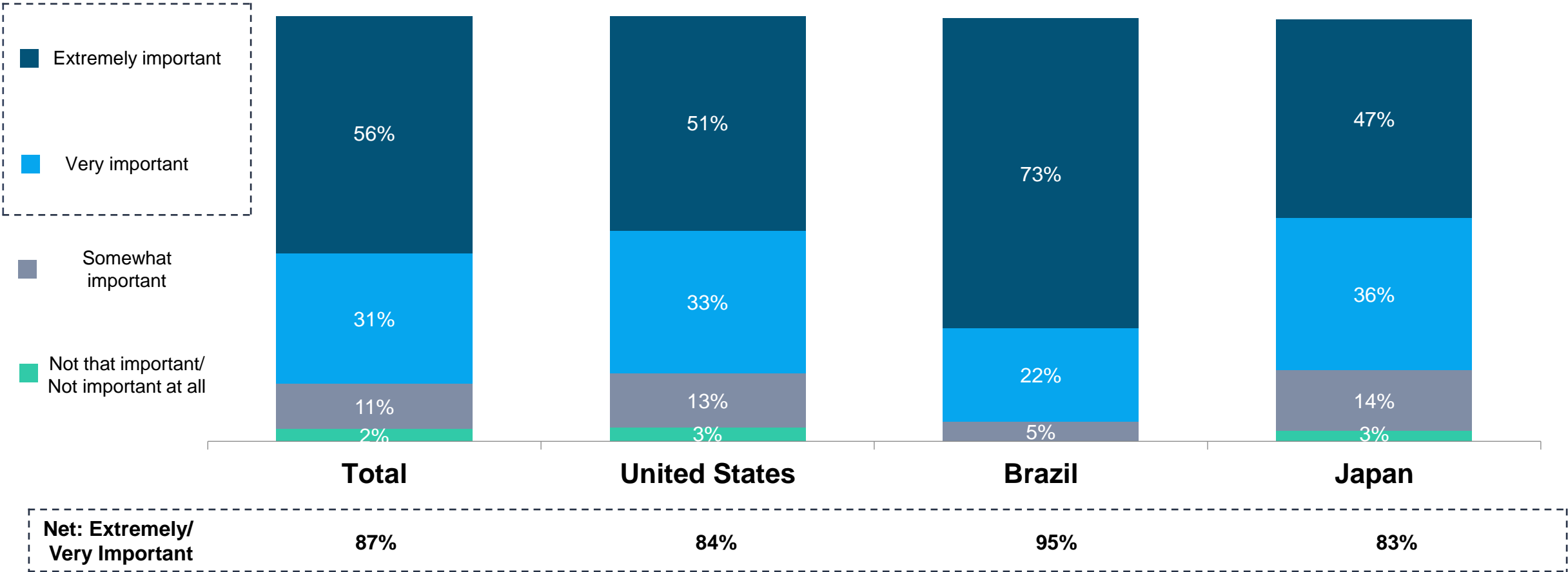
# Among those with hearing difficulties, the two most common issues are difficulty hearing in noisy environments and tinnitus. Video gamers in Japan are less likely to report all difficulties listed.

Hearing Difficulties <i>(among those with not-excellent hearing)</i>	Total	United States	Brazil	Japan
Difficulty hearing in a noisy environment	47%	60%	54%	34%
Tinnitus (ringing, buzzing, or hissing in one or both ears)	36%	44%	44%	25%
Not understanding what other people say	32%	46%	51%	10%
Having to turn up the volume to hear better	29%	37%	46%	13%
Sensitivity to certain sounds	28%	43%	37%	12%
Ears feeling full, blocked, or fuzzy	20%	26%	27%	13%
Difficulty following or engaging in conversations	17%	24%	27%	7%
Difficulty distinguishing sounds (e.g., hearing 'mat' versus 'sat')	16%	28%	20%	7%
None of the above	20%	7%	4%	38%



# Preventing hearing difficulties is important to most video gamers, particularly in Brazil.

## Preventing Hearing Loss

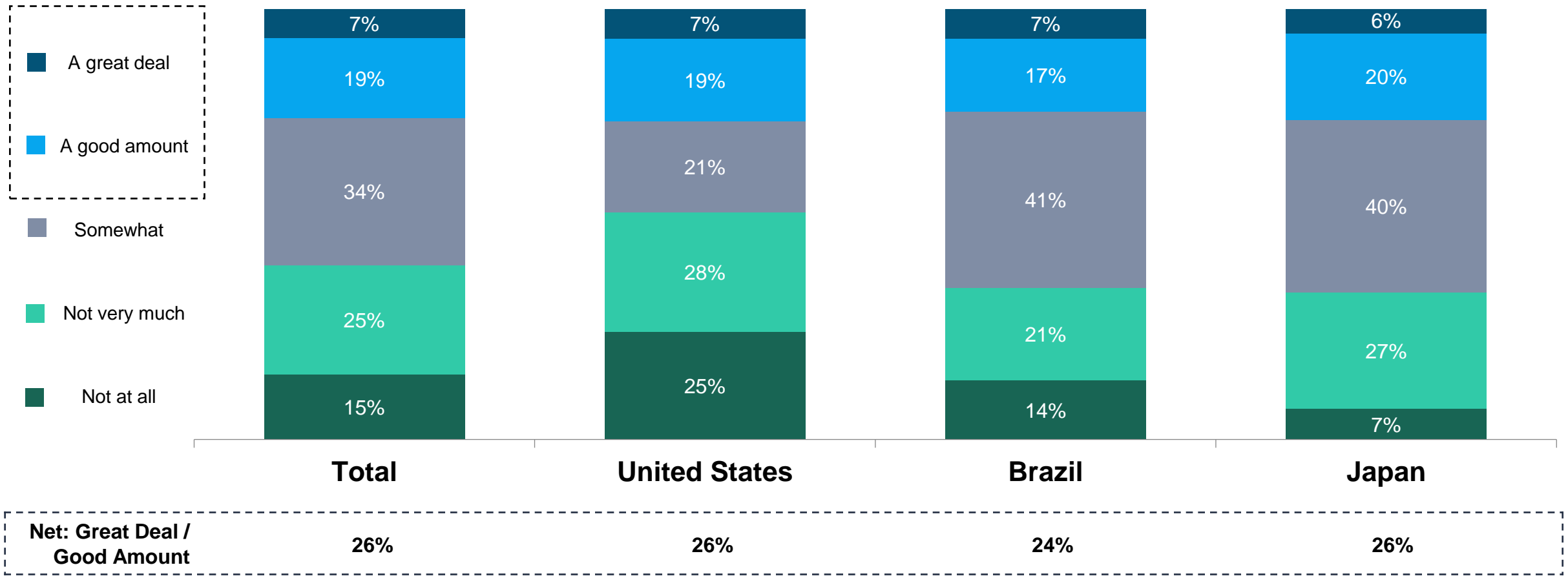


Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G3. How important is preventing hearing difficulties or loss to you?

# Among those with hearing difficulties, only one-quarter feel their video gaming habits have contributed to their hearing issues.

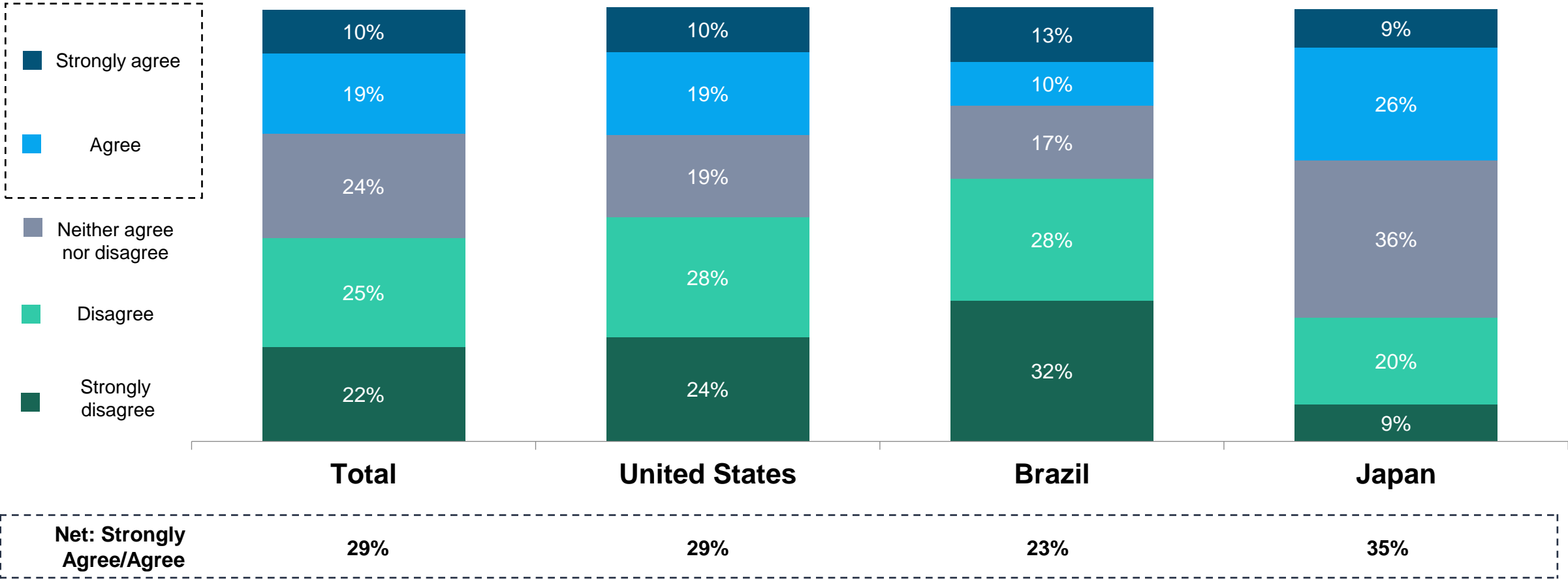
## Perceived Impact of Gaming Habits on Hearing

(among those with hearing difficulties)



# Less than one-third of all video gamers believe they are at risk of hearing loss from playing video games. This sentiment is highest in Japan, at 35%.

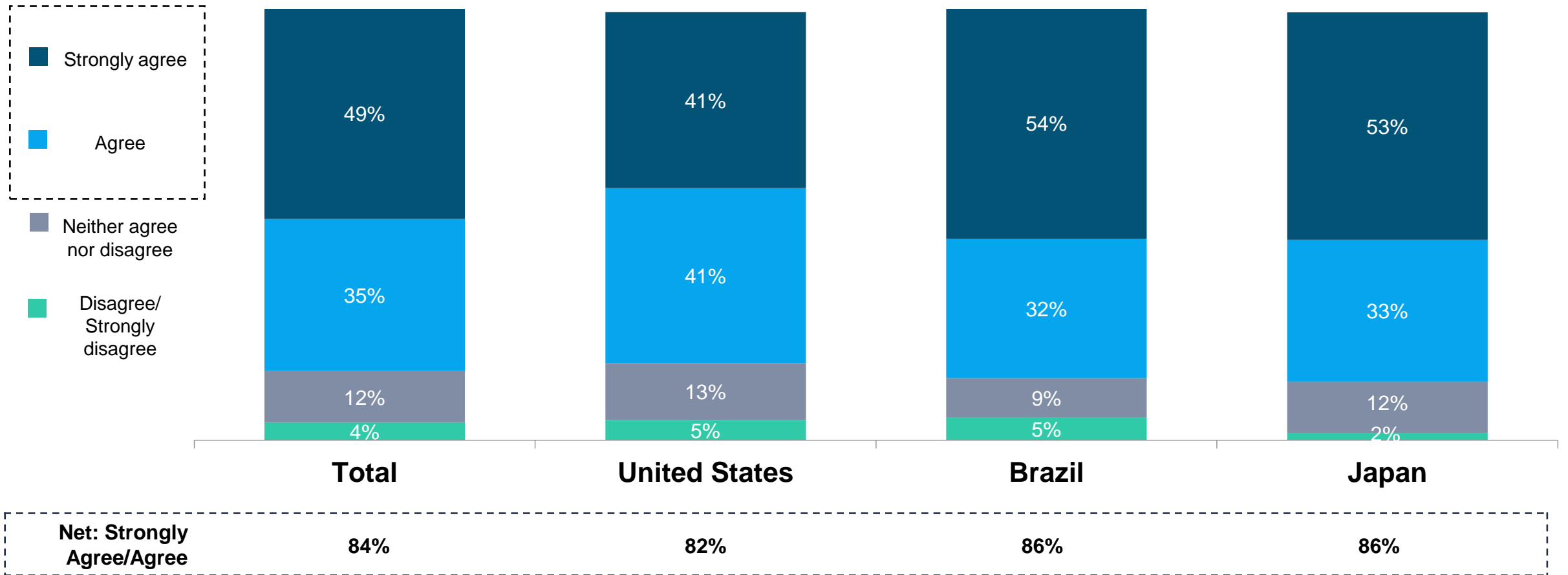
Perceived Risk of Hearing Loss



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G14. How much do you agree or disagree with the following statement? I feel that I am at risk of hearing loss from playing video games.

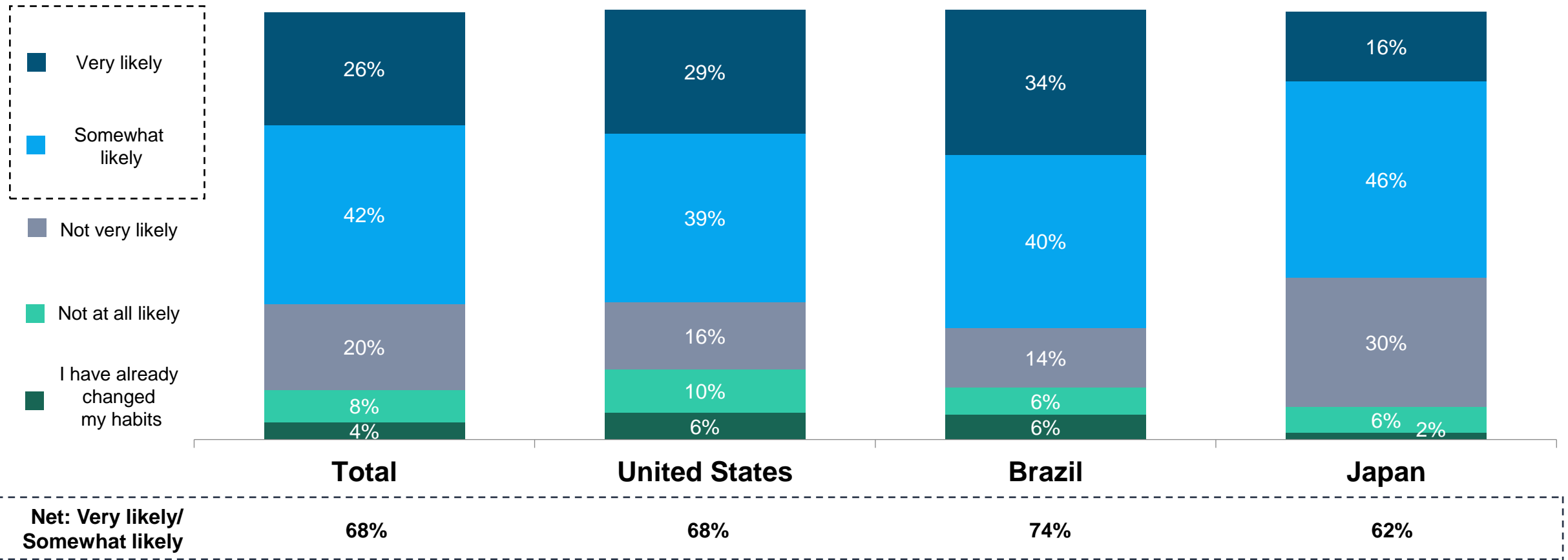
# Video gamers overwhelmingly believe that hearing loss would significantly reduce their quality of life.

## Predicted Impact of Hearing Loss on Quality of Life



# More than two-thirds say they are likely to change their habits after being informed of the risk of irreversible hearing loss. Video gamers in Brazil are more likely to change their video gaming listening habits than those in the United States and Japan.

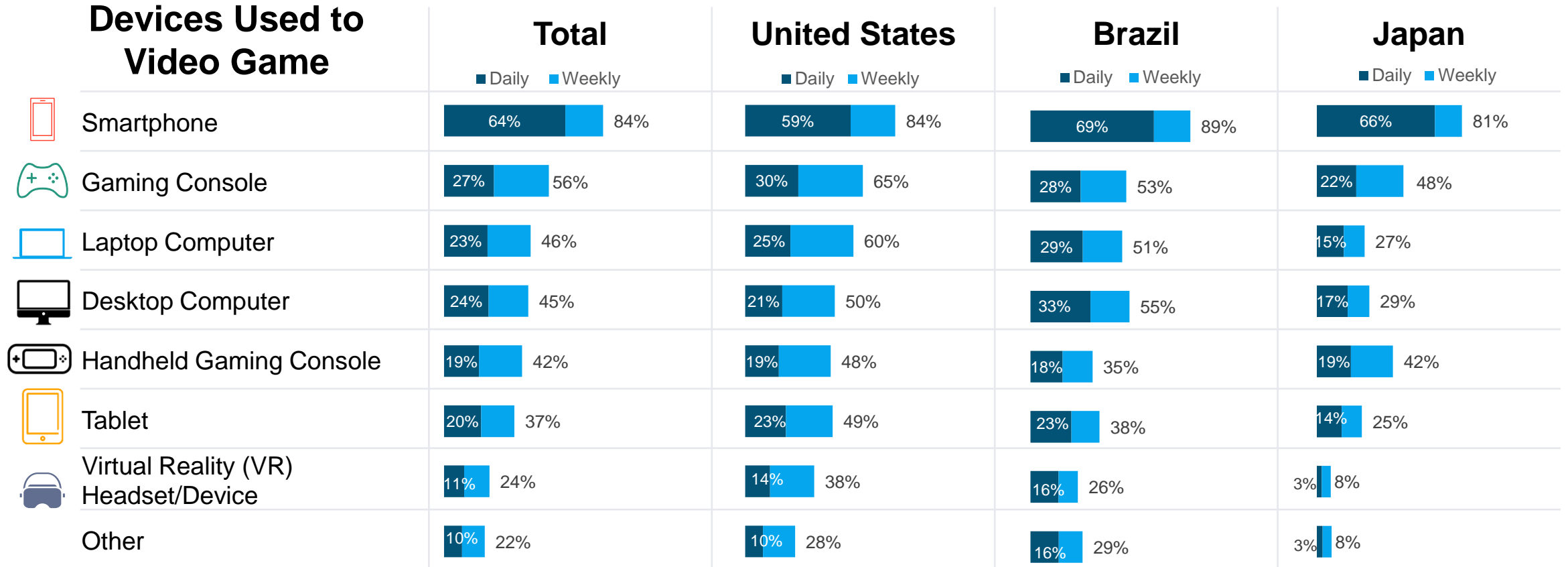
## Likelihood to Change Listening Habits



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G16. According to new research, video gamers may be risking irreversible hearing loss due to unsafe sound levels. Knowing about the potential for video gaming to cause hearing damage, how likely are you to change your listening habits while gaming?

# ▶ **Video Gaming Habits**

# Smartphones and gaming consoles are the most commonly used devices for video gaming.

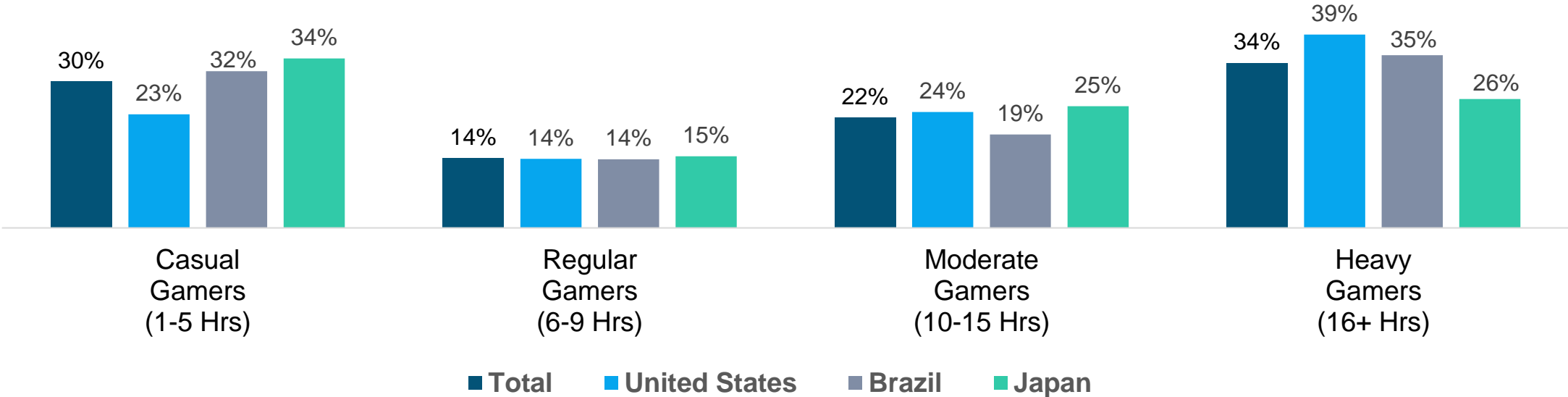


**On average, about 15 hours per week is spent playing video games across all three countries. U.S. video gamers spend more time playing than Brazilian and Japanese video gamers.**

**Hours Spent Playing Video Games Per Week**

 **15** Avg. Hrs. Per Week

United States	17 Hrs.
Brazil	15 Hrs.
Japan	12 Hrs.

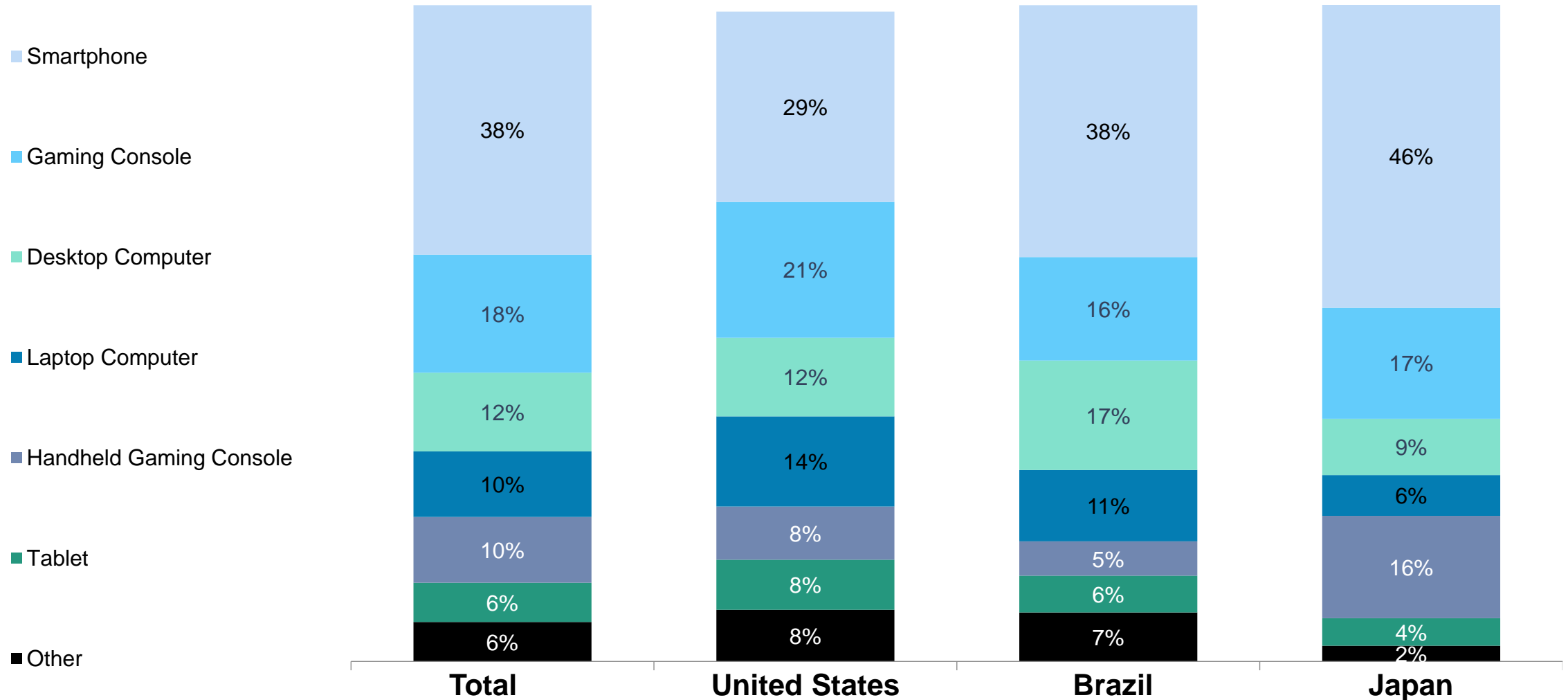


Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G6. How many hours per week do you spend playing video games on any device? Please enter the total number of hours.



**Overall, smartphones are the most popular devices by far. Gaming consoles are more popular in the United States, desktops in Brazil, and handheld consoles in Japan.**

Share of Video Gaming Hours by Device



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G6A. And of that X hours, approximately how much of that is spent playing games on each of the following devices on an average week?

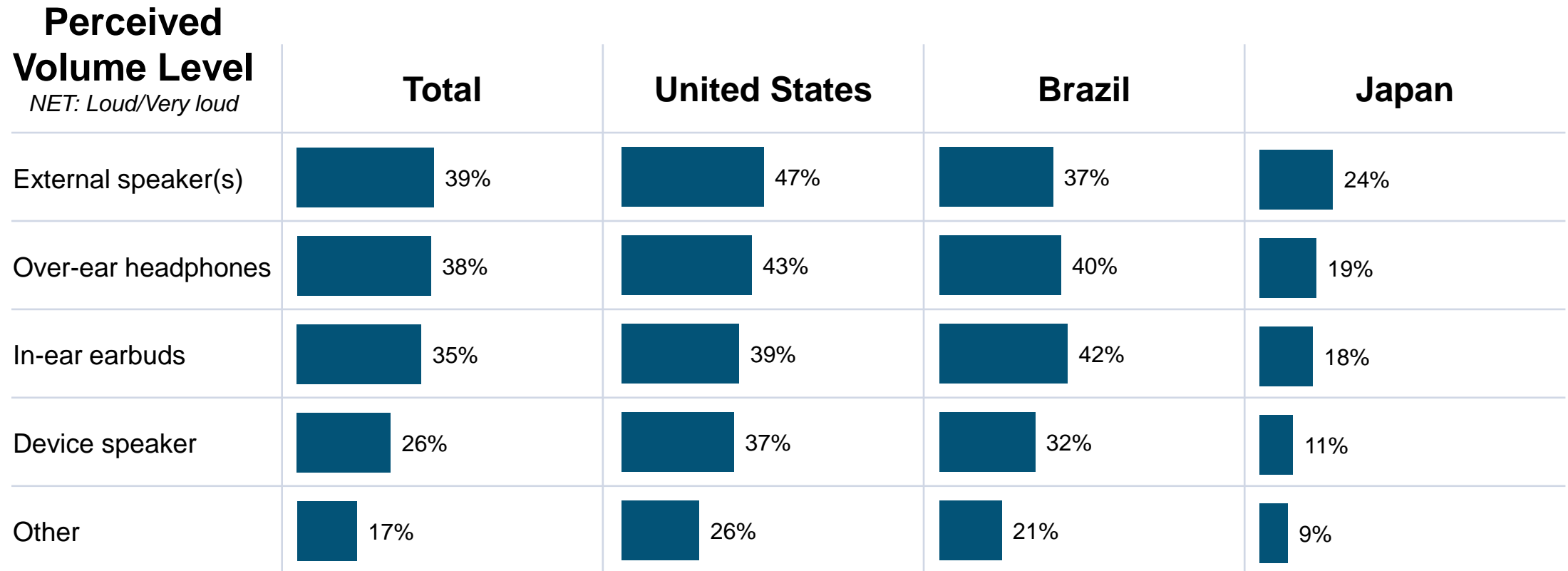
# The most popular types of video games varied by country.

Types of Games	Total	United States	Brazil	Japan
Adventure games	38%	44%	51%	18%
Role-playing games (RPG)	35%	35%	27%	42%
Puzzle games	34%	46%	27%	29%
Survival games	33%	37%	50%	12%
Simulation games	33%	33%	38%	27%
Strategy games	32%	34%	48%	15%
Sports games	32%	43%	32%	20%
First-person shooter games (FPS)	31%	33%	44%	15%
Fighting games	31%	39%	43%	11%
Racing games	30%	39%	35%	14%
Battle royale games	28%	33%	38%	14%
MMO games (Massively Multiplayer Online)	18%	18%	26%	10%
Platformers	14%	15%	22%	5%
Virtual reality games	14%	23%	13%	5%
Sandbox games	13%	19%	14%	7%
Other	4%	1%	3%	9%

# Video gamers listen to audio primarily through device speakers. Earbuds, headphones, and external speakers are more popular in the United States and Brazil than in Japan.

Listening Devices	Total	United States	Brazil	Japan
Device speaker	56%	57%	52%	57%
In-ear earbuds	41%	47%	47%	29%
Over-ear headphones	36%	48%	42%	18%
External speaker(s)	31%	43%	29%	22%
Other	12%	9%	11%	16%

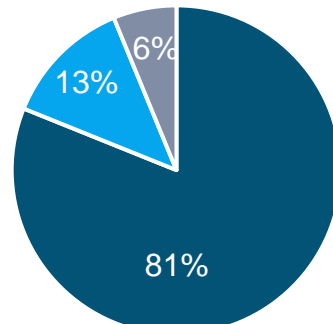
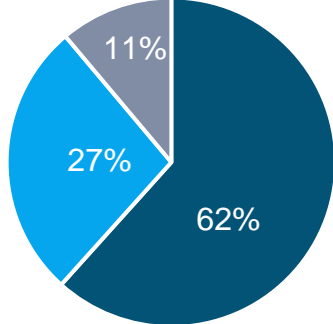
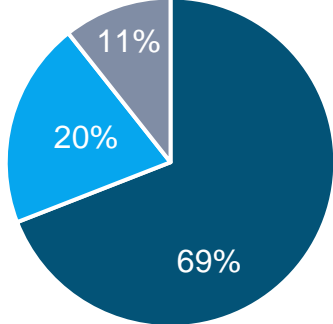
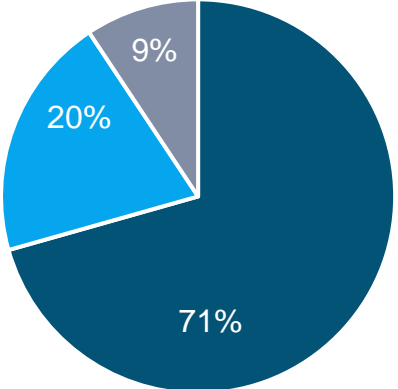
# Perceived volume levels differ by audio source, with device speakers lowest in all countries. U.S. and Brazilian video gamers report listening at louder volumes than Japanese video gamers.



# The majority of video gamers in all three countries believe their volume and listening length habits are fine the way they are.

- The volumes at which I listen to sounds are fine.
- I should turn down the volume, but I have not done so yet.
- Recently, I have started to turn down the volume more often.

## Volume Level

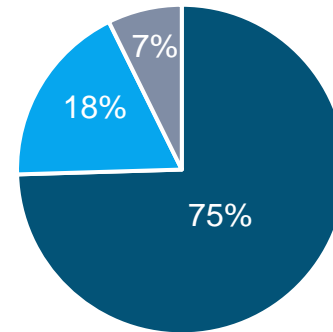
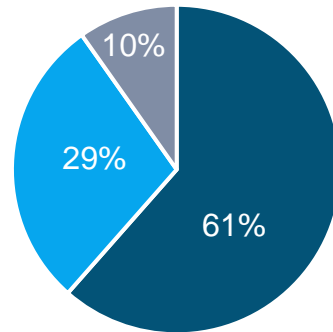
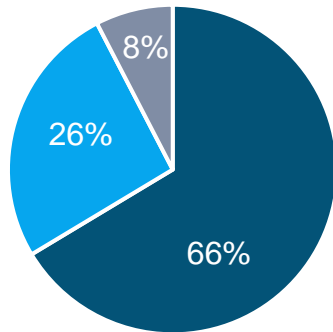
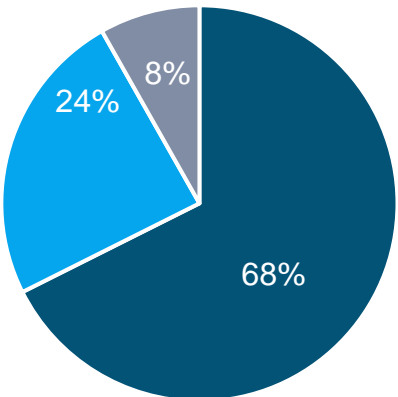


United States

Brazil

Japan

## Listening Time



United States

Brazil

Japan





































- The length of time I spend listening to sounds is fine the way it is.
- I should shorten my listening sessions, but I have not done so yet.
- Recently, I have started to shorten my time spent listening to sounds.

Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 G10. Which of the following best describes your current listening habits regarding how loud you typically set the volume?  
 G11. Which of the following best describes your current listening habits regarding how long you listen to sounds?

# Most video gamers report taking at least one step to protect their hearing—most commonly, lowering the volume. On the whole, young adults in Japan are less likely than those in the United States and Brazil to take steps to protect their hearing while video gaming.

Steps Taken to Protect Hearing	Total	United States	Brazil	Japan
Lowering the volume level	48%	53%	56%	34%
Turning down certain noise features that are less important to gameplay	32%	38%	39%	18%
Taking breaks periodically (i.e., every hour)	30%	34%	31%	25%
Using noise-cancelling headphones	24%	27%	32%	12%
Limiting the amount of time spent gaming	22%	30%	21%	15%
Sitting farther away from the speaker(s)	21%	24%	26%	12%
Using volume-limiting headphones/devices	18%	23%	25%	6%
Other	1%	1%	1%	0%
None of these	15%	9%	6%	31%

# In all countries, video gamers view hearing specialists as the most trusted source of hearing protection advice.

Advice on Protecting Hearing While Gaming	Total	United States	Brazil	Japan
Hearing specialist (e.g., audiologist)	 35%	 33%	 40%	 32%
Video game manufacturers	 12%	 15%	 14%	 9%
Family members	 11%	 10%	 7%	 15%
Friends/people I game with	 10%	 10%	 12%	 8%
Device manufacturers	 8%	 10%	 8%	 6%
Other healthcare providers	 5%	 6%	 6%	 4%
Bloggers/influencers	 4%	 4%	 4%	 3%
Non-profit health organizations	 4%	 5%	 5%	 1%
None of these	 11%	 7%	 4%	 22%

# When it comes to exposure to potentially damaging noise levels overall, the most commonly reported source is using headphones for long periods of time or at loud volumes.

Loud Activities	Total	United States	Brazil	Japan
Use headphones for long periods of time	43%	53%	50%	27%
Use headphones at loud volumes	28%	33%	39%	12%
	52%	62%	63%	31%
Spend time in a place where there is loud music	20%	26%	25%	10%
Attend concerts	20%	22%	21%	17%
Attend sporting events or other large events	20%	28%	18%	13%
Play an instrument	15%	24%	14%	7%
Work in a noisy environment (factory, construction, etc.)	15%	15%	20%	10%
Hunt	4%	8%	4%	1%
None of these	24%	13%	13%	46%

Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648

Q24. Which, if any, of the following do you do regularly? Brackets indicate the % who participate in either activity. Due to the fact that some respondents may select both options, the net will not sum to the two numbers combined.



# ▶ **Receptivity to Proposed Safe Listening Features**

# WHO Proposed Safe Listening Guidance

A series of features (and their definitions, as included below) were provided to respondents in random order\* to gauge their likelihood of use and perceived impact on the gaming experience.

<b>Sound dose tracking</b>	<i>Sound dose tracking is a built-in feature on video gameplay devices that tracks the amount of sound a player is exposed to over the course of a week and shares with the player if they have been subjected to unsafe sound levels.</i>
<b>Headphone safety mode</b>	<i>Headphone safety mode would automatically reduce the volume to improve safety when using headphones (either over-ear or in-ear).</i>
<b>Volume channel controls</b>	<i>Volume channel controls provide a gameplayer with the ability to adjust the volume levels of various soundtrack items, including master game volume level, game dialogue level, sound effects level, music level, and voice chat level.</i>
<b>Smart listening mode</b>	<i>Smart listening mode would be a simplified mode that, when selected, would enable sub-features designed to optimize listening safety.</i>
<b>Dynamic range optimization</b>	<i>Dynamic range optimization would reduce louder in-game sounds while amplifying some softer in-game sounds in order to improve hearing safety during gameplay.</i>
<b>Passive gameplay volume reduction</b>	<i>Passive gameplay volume reduction would reduce the volume of the game during passive gameplay moments, such as in between rounds and while waiting to connect to an online game, which would not affect immersion or gameplay.</i>
<b>Tinnitus sound removal</b>	<i>Tinnitus sound removal would remove in-game sounds that simulate tinnitus, which is a ringing or buzzing sound associated with hearing damage.</i>

\*Each aspect of the guidance was shown individually and then was followed with likelihood to use and perceived impact on gaming experience. Some then had 1-2 follow-up questions that were asked. Once all questions for one guideline were answered, the survey moved to the next randomly selected guideline. After all guidelines were evaluated, respondents were asked to rank all guidelines in terms of likelihood to use. Smart listening mode was asked last since it encapsulated a mix of previously mentioned guidelines.

**Overall, video gamers report being very likely to use all of the features tested, although acceptance does vary by country. In all three countries, volume channel controls are most likely to be used.**

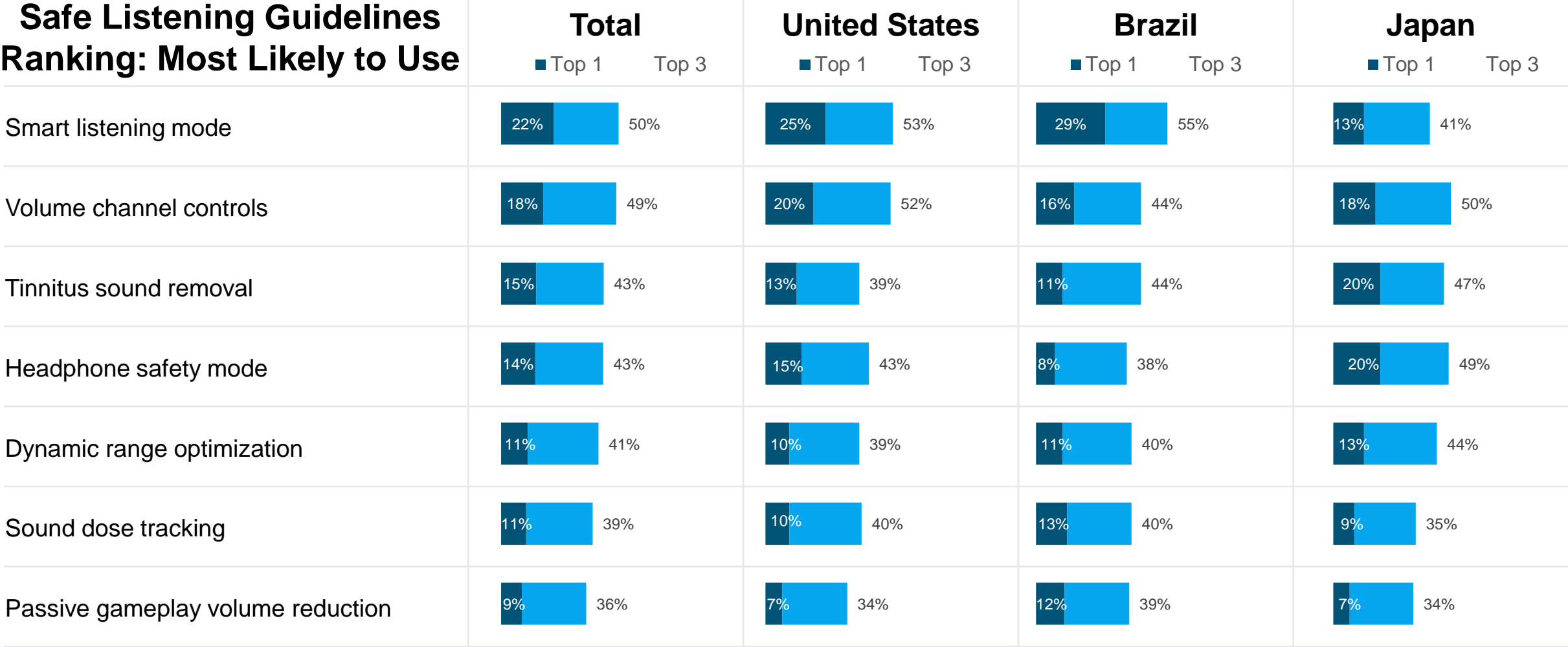
## Guideline Use Likelihood

*NET: Very likely/somewhat likely*

	Total	United States	Brazil	Japan
Volume channel controls	86%	92%	92%	72%
Smart listening mode	79%	86%	88%	63%
Dynamic range optimization	79%	86%	85%	66%
Passive gameplay volume reduction	78%	81%	87%	65%
Tinnitus sound removal	78%	83%	85%	65%
Headphone safety mode	77%	84%	82%	66%
Sound dose tracking	73%	79%	86%	54%

**When asked to rank all features based on likelihood to use, smart listening mode ranked highest, followed by volume channel controls. This pattern holds in the United States and Brazil, but in Japan, volume channel controls are most likely to be used, followed by headphone safety mode.**

**Safe Listening Guidelines Ranking: Most Likely to Use**



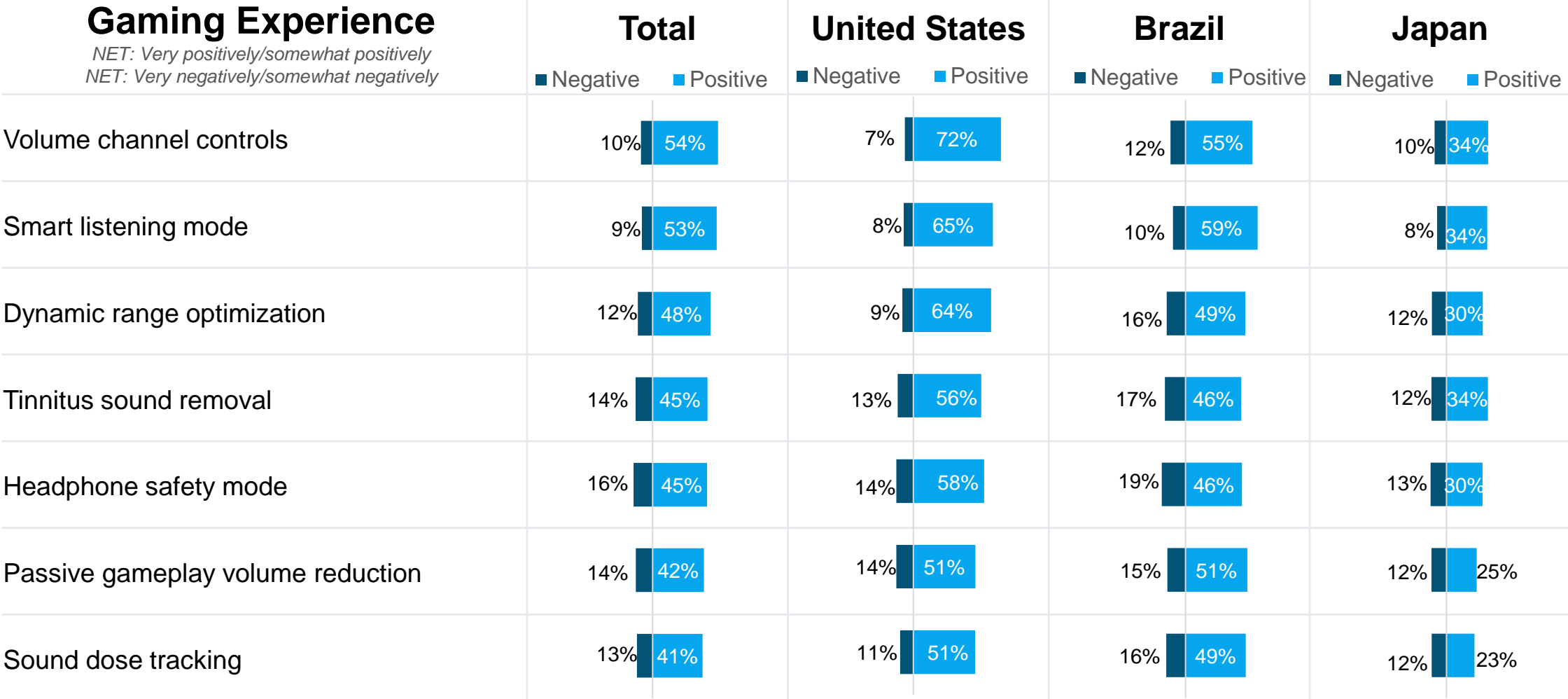
Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648

Q20. Which of the following safe listening features would you be most likely to use? Please rank from most likely to least likely to use.

# Most video gamers do not think any of the proposed safe listening features would negatively impact their video gaming experience.

## Predicted Impact on Video Gaming Experience

NET: Very positively/somewhat positively  
NET: Very negatively/somewhat negatively



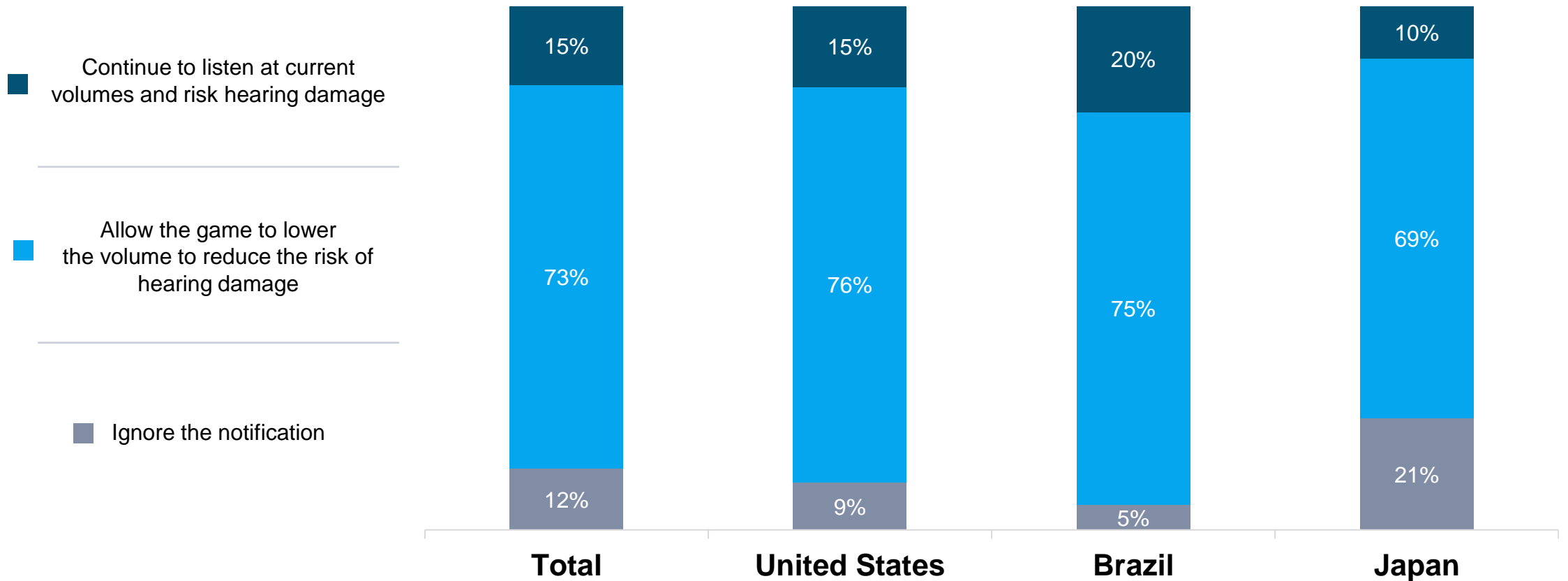
Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
Q2, Q6, Q8, Q11, Q14, Q16, Q18. How do you think [GUIDELINE] would impact your overall gaming experience?

**Real-time notifications are the preferred method in Brazil and the United States. In Japan, there is less preference for any method of notification about sound dose tracking.**

Sound Dose Tracking Notification Preference	Total	United States	Brazil	Japan
Using a real-time in-game notification system	32%	39%	46%	11%
Using a dedicated menu option under game settings	29%	34%	31%	22%
At the end of my gameplay session just before I switch the gameplay device off	27%	32%	28%	19%
Whenever I switch on my gameplay device	24%	33%	22%	18%
Whenever I pause the game	23%	26%	32%	10%
None of the above	19%	12%	5%	39%

# Nearly three-fourths would choose to let their game lower the volume to reduce risk of hearing damage. This preference was higher in the United States and Brazil than in Japan.

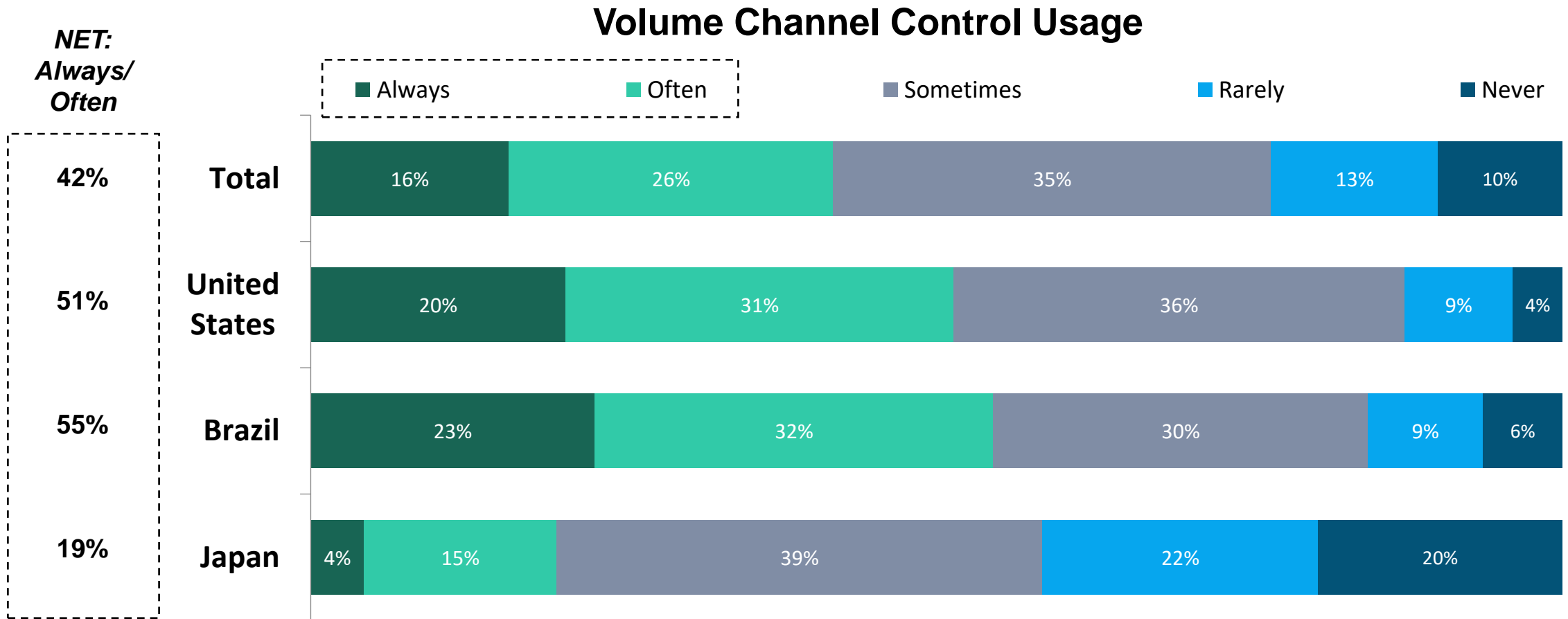
## Predicted Response to Unsafe Listening Warnings



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648

Q4. Let's imagine the Sound dose tracking feature has detected that you have been exposed to unsafe levels of sound over the past week. You receive a notification during a break in your gameplay that gives you two options. Are you more likely to choose to...?

**Overall, only about 4 in 10 video gamers use existing volume channel controls always or often. Young adults in the United States and in Brazil use these controls more often than those in Japan.**



Base: Total Sample n=1678; United States n=506; Brazil n=524; Japan n=648  
 Q9. Some games currently offer this feature. How often have you used volume channel controls (adjusting volume of various soundtrack items) while playing video games?

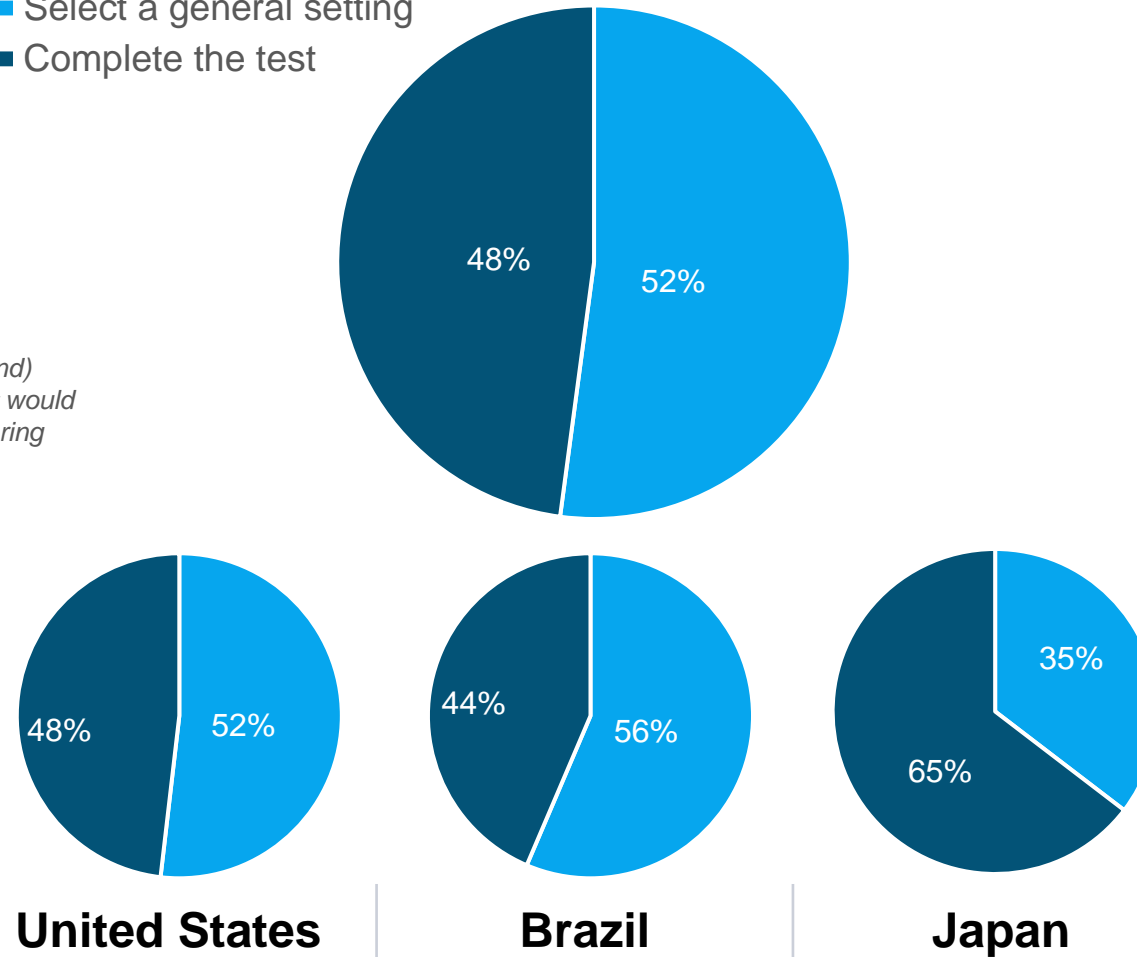


# Overall, about half of video gamers would complete a dynamic range test and half would select a general setting. The general setting is less popular in Japan.

- Select a general setting
- Complete the test

## Dynamic Range Optimization Test

*Would you rather complete a brief (30-60 second) dynamic range test, or select a general setting that would similarly optimize sound settings to improve hearing safety?*

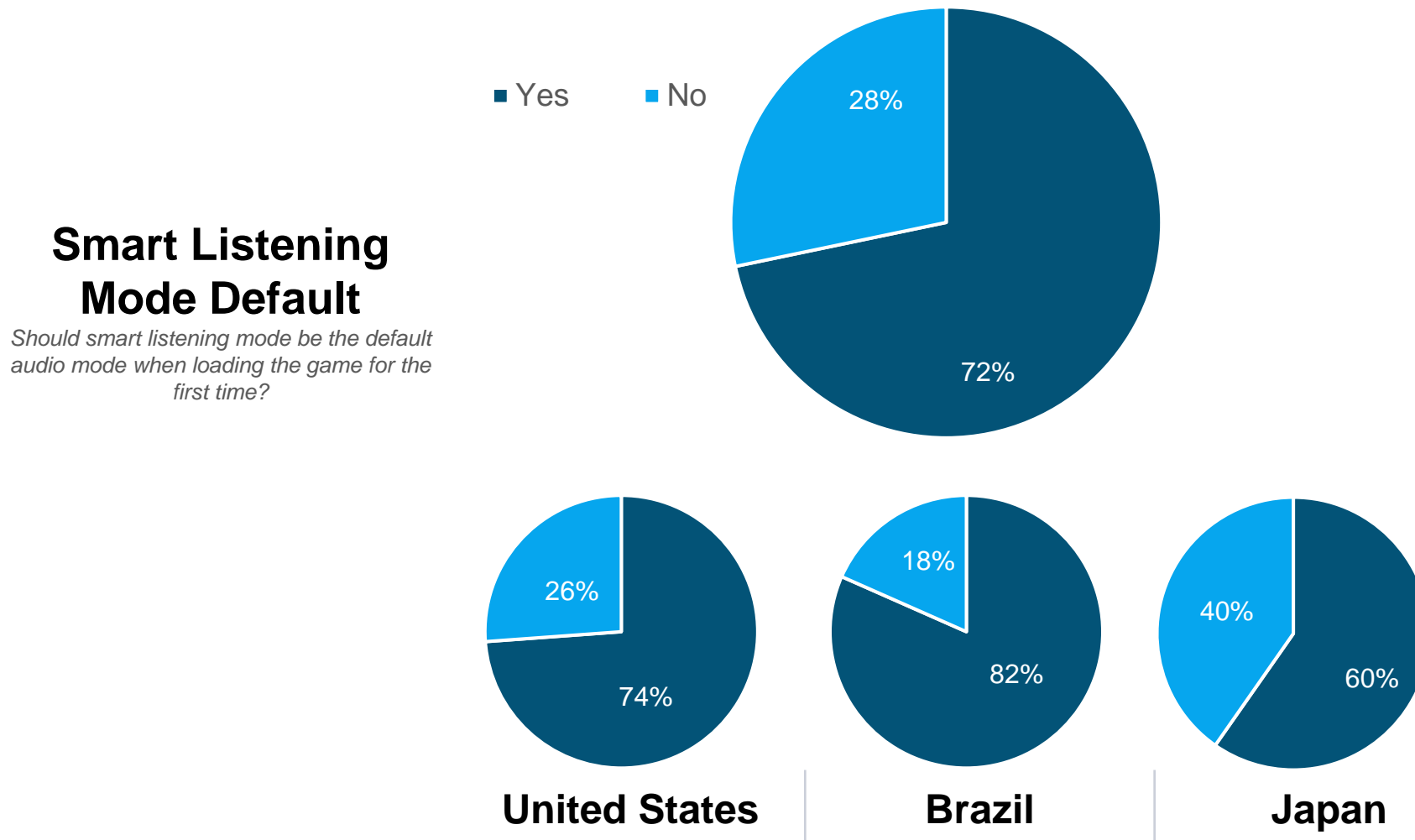


United States

Brazil

Japan

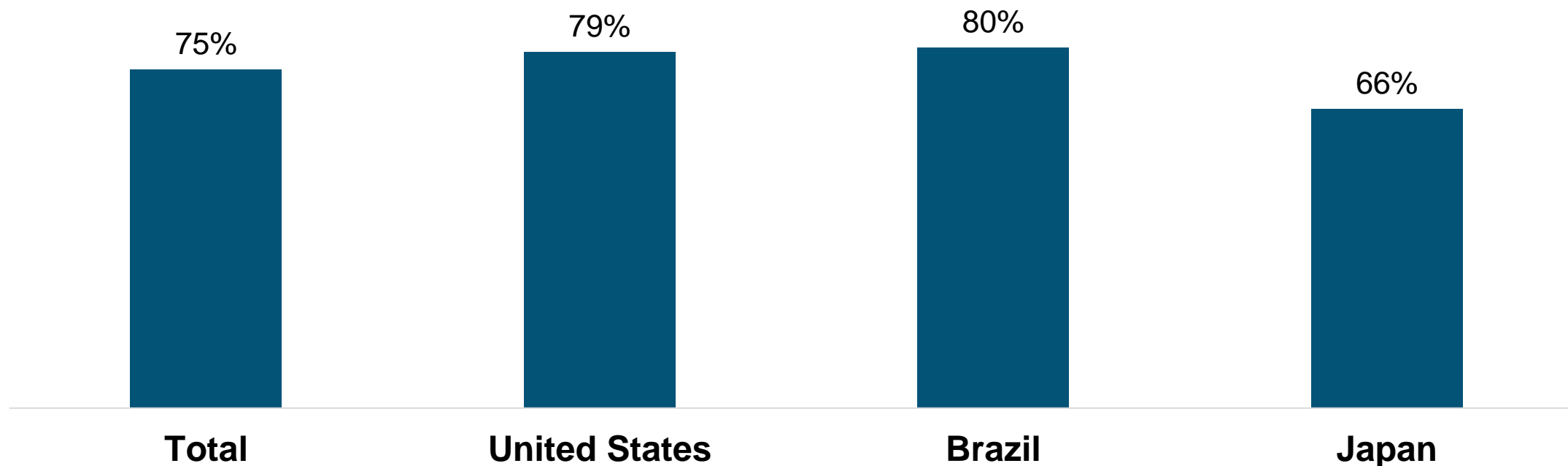
# Overall, nearly three quarters of video gamers believe smart listening mode should be the default audio mode when loading a game, although this is less common in Japan.



# Three-fourths of video gamers are likely to read general safe listening warnings while video gaming. Again, this is less likely in Japan.

## General Safe Listening Warnings

*NET: Very likely/somewhat likely*



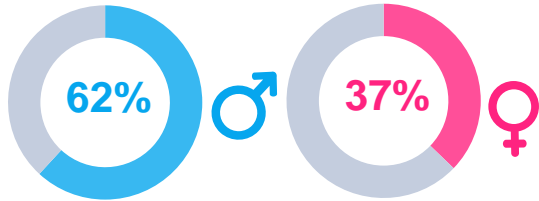
# According to video gamers, the ideal time for warnings to be shown would be upon loading the game.

Preferred Time to Show Listening Warnings	Total	United States	Brazil	Japan
When I load the game	38%	42%	33%	40%
When I pause the game, or there is a reasonable break in gameplay (e.g., in between rounds)	23%	24%	27%	17%
Whenever I access the audio menu	21%	22%	26%	14%
When I exit the game	10%	8%	11%	13%
Never	8%	4%	3%	16%

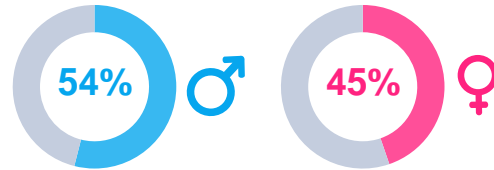
# Appendix

# DEMOGRAPHICS

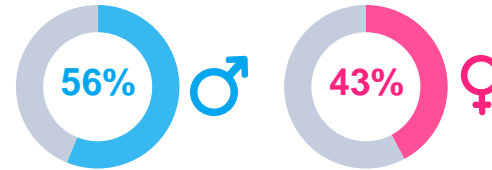
## Total Sample



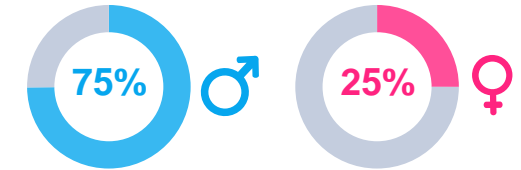
## United States



## Brazil

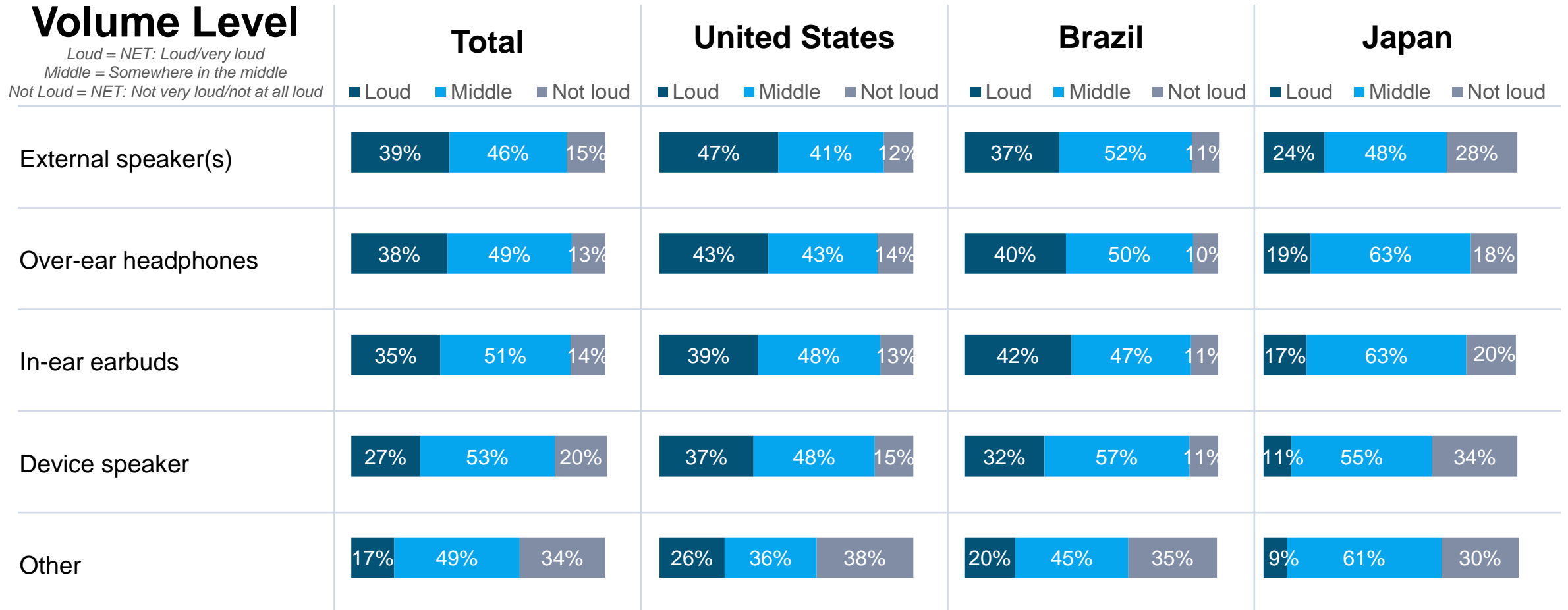


## Japan



Total Sample		United States		Brazil		Japan	
<b>Age</b>		<b>Age</b>		<b>Age</b>		<b>Age</b>	
18-24	35%	18-24	45%	18-24	40%	18-24	21%
25-35	65%	25-35	55%	25-35	60%	25-35	79%
<b>Country</b>		<b>Edu</b>		<b>Edu</b>		<b>Edu</b>	
United States	33%	HS or less	36%	Primary	12%	HS or less	3%
Brazil	33%	Some college/ 2 year	33%	Secondary	54%	Some college/ 2 year	35%
Japan	33%	4 year	21%	Tertiary or university +	34%	4 year	54%
		Post-grad	10%			Post-grad	8%
		<b>Region</b>		<b>Region</b>		<b>Region</b>	
		Northeast	17%	North	11%	Hokkaido/Tohoku	7%
		Midwest	20%	North East	33%	Kanto/Koshin	37%
		South	38%	Central West	10%	Chubu/Hokuriku	19%
		West	25%	South	15%	Kinki	21%
				South East	31%	Chugoku/Shikoku/Kyushu	16%

# Volume Level by Listening Device Type



Base: Bases vary by device, Small base size for "other" in the United States (n=47); interpret with caution.  
G9. When you play video games using the device speaker, would you say that the volume is set...?

# Audio Devices Used, by Video Game Device

<b>Total</b>	Desktop computer	Laptop computer	Smart-phone	Tablet	Gaming console	Handheld gaming console	Virtual reality (VR)	Other	<b>United States</b>	Desktop computer	Laptop computer	Smart-phone	Tablet	Gaming console	Handheld gaming console	Virtual reality (VR)	Other
Device speaker	24%	30%	37%	32%	33%	40%	24%	27%	Device speaker	26%	31%	33%	26%	27%	34%	25%	22%
External speaker(s)	20%	18%	11%	14%	24%	15%	19%	15%	External speaker(s)	20%	23%	13%	18%	26%	20%	23%	19%
Over-ear headphones	30%	24%	15%	19%	21%	17%	27%	21%	Over-ear headphones	34%	23%	18%	23%	26%	19%	26%	29%
In-ear earbuds	23%	25%	30%	30%	18%	22%	26%	27%	In-ear earbuds	17%	22%	32%	31%	19%	23%	23%	22%
Other	3%	3%	7%	5%	4%	6%	4%	10%	Other	3%	1%	4%	2%	2%	4%	3%	8%
<b>Brazil</b>									<b>Japan</b>								
Device speaker	23%	26%	31%	27%	32%	34%	23%	29%	Device speaker	21%	35%	48%	50%	40%	52%	22%	40%
External speaker(s)	17%	14%	10%	13%	26%	12%	12%	12%	External speaker(s)	26%	17%	11%	8%	19%	13%	24%	11%
Over-ear headphones	32%	28%	21%	21%	20%	23%	30%	16%	Over-ear headphones	20%	17%	6%	8%	15%	9%	25%	9%
In-ear earbuds	26%	29%	33%	33%	20%	26%	30%	33%	In-ear earbuds	27%	24%	23%	24%	16%	18%	29%	26%
Other	2%	3%	5%	6%	2%	5%	5%	10%	Other	6%	7%	12%	10%	10%	8%	0%	14%