

# The Relationship Between Movie Theatre Attendance and Streaming Behavior

*Survey Findings*

February 2020



Building a better  
working world

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# I: About this study

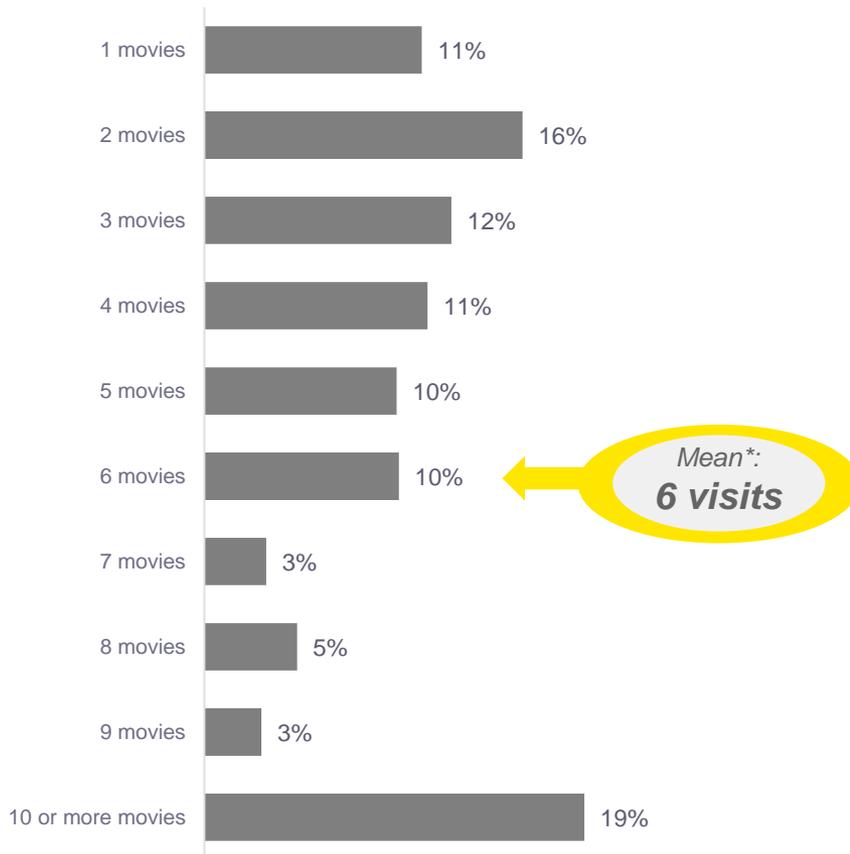
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- ▶ All results in this study are based on an EY survey fielded in November 2019 that asked questions about:
  - ▶ Movie theatre attendance over the last twelve months
  - ▶ Streaming consumption over the last twelve months
  - ▶ Awareness of movies released in theaters and its impact on home viewing
  - ▶ Demographic information (race, age, income, etc.)
- ▶ The survey included 2,015 respondents who saw at least one movie in theatres over the last twelve months and an additional 505 respondents who did not see any movie in theatres.
- ▶ Of the 2,520 total respondents, 79% of the respondents streamed at least one hour of online content per week over the last twelve months, and 69% saw at least one movie in theatres and streamed at least one hour of online content per week in the last twelve months.

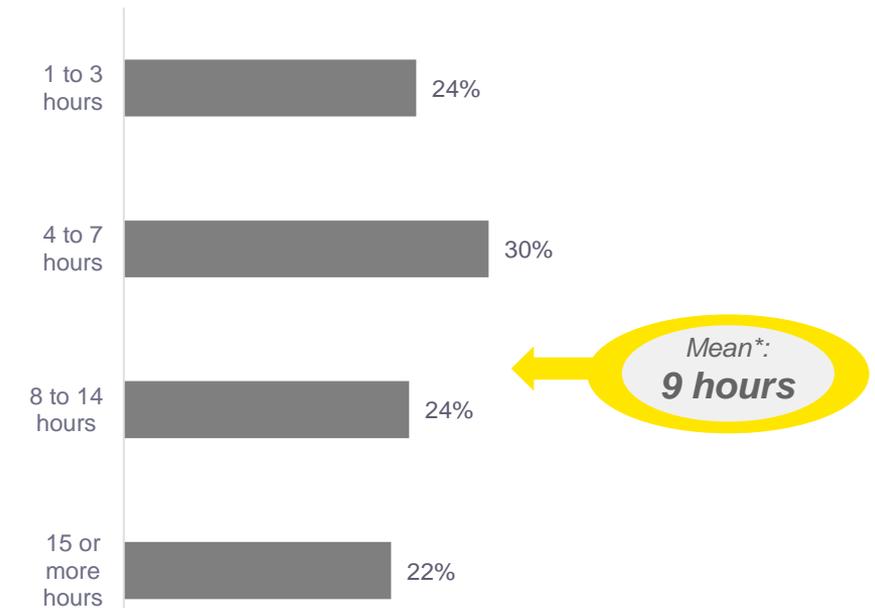
Unless otherwise noted, the survey results presented in this study only include respondents who saw at least one movie in theatres and streamed at least one hour of online content per week in the last twelve months. These 1,734 respondents are called “dual-consumers” (DC’s).

# II: Movie theatre attendance and streaming consumption, dual-consumers

During the last 12 months, about how many times did you go to the movies at theatres?



During the last 12 months, on average, how many hours per week would you say you spent streaming online-subscription content or downloads from any of the following services?



Services include: Netflix, Hulu, Amazon Video, HBO, Showtime, Starz, RedBox On-Demand, iTunes

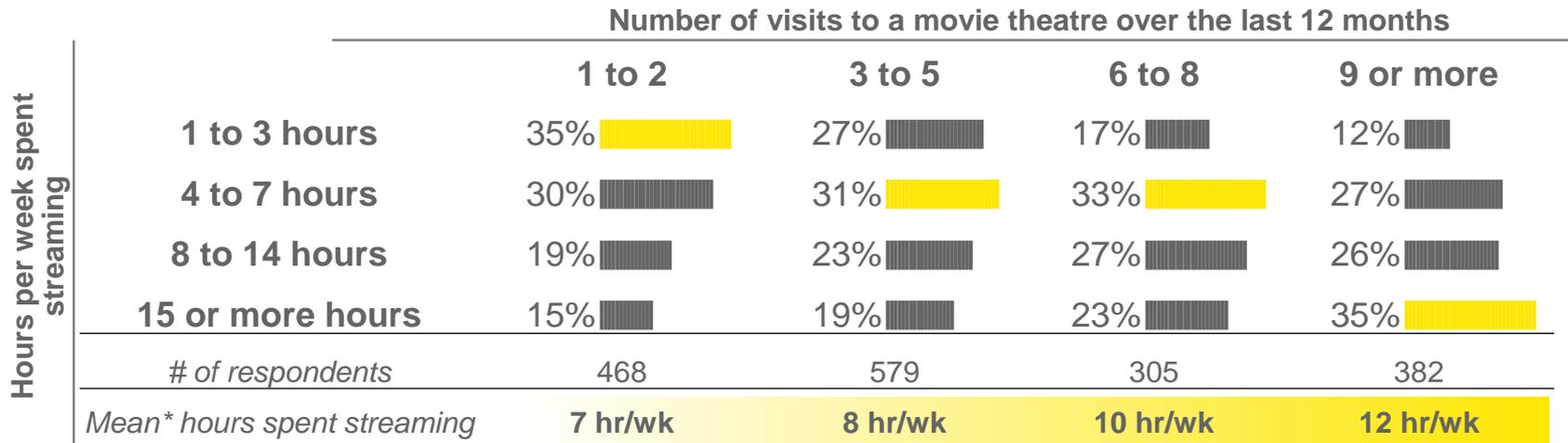
n = 1,734

*These results have not changed significantly from earlier iteration of the survey. See slide 32.*

\*Means are reported as 95% trimmed means.

# Positive relationship between movie theatre attendance and streaming behavior

Movie theatre attendance and streaming consumption are positively related – those who attend movies in theatres more frequently also tend to consume streaming content more frequently



Of dual-consumers (DC's) who visited a movie theatre twice at most in the last 12 months, 35% streamed less than 4 hours per week.

Of DC's who reported 9 or more visits to a movie theatre in the last 12 months, only 12% streamed less than 4 hours per week.

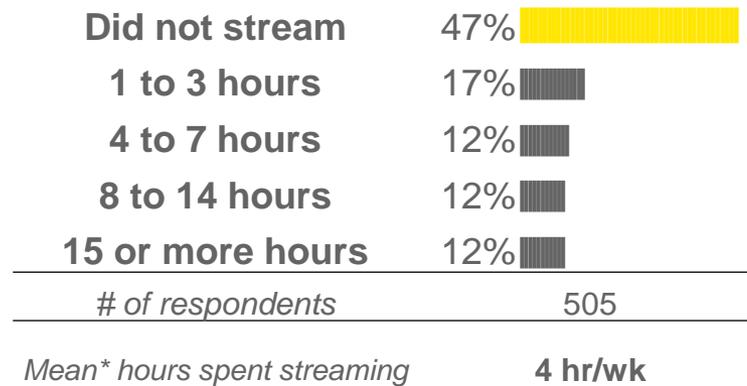
Of DC's who visited a movie theatre twice at most in the last 12 months, only 15% streamed online content for 15 or more hours per week.

Of DC's who reported 9 or more visits to a movie theatre in the last 12 months, 61% streamed online content for 8 or more hours per week, and 35% streamed at least 15 hours per week.

Note: Figures may not appear to sum due to rounding.  
\*Means are reported as 95% trimmed means.

# Nearly half of those who did not visit a movie theatre in the last 12 months did not stream online content

## Online streaming behavior of those who did not visit a movie theatre in the last 12 months



*Of those who didn't visit a movie theatre in the last 12 months, nearly half (47%) didn't stream any online content.*

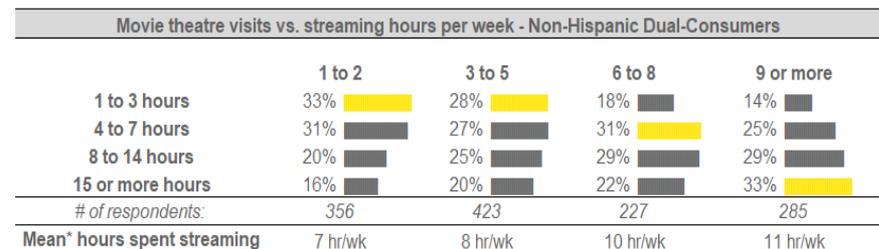
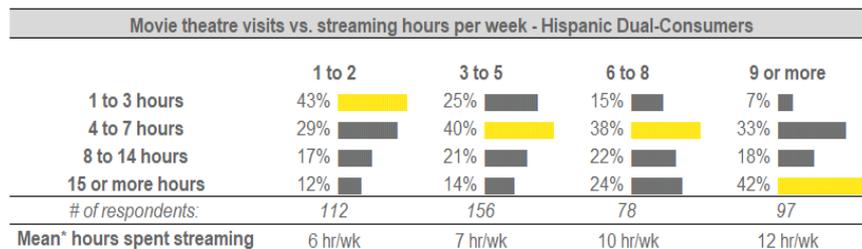
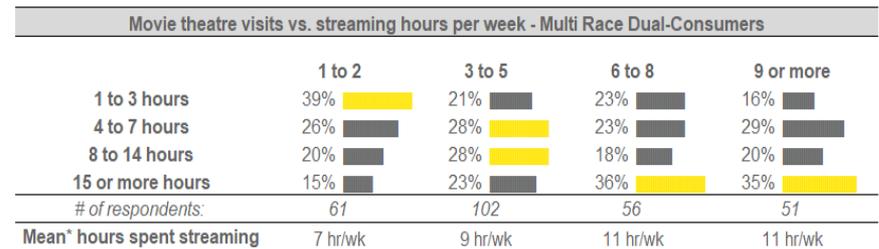
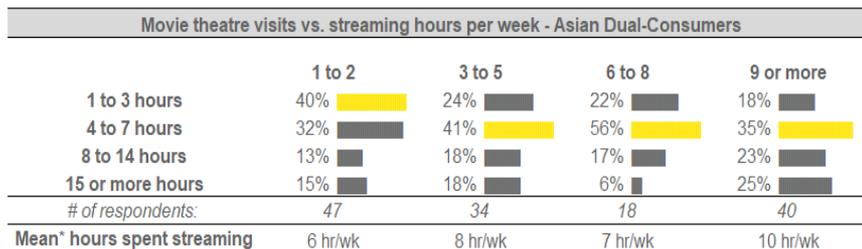
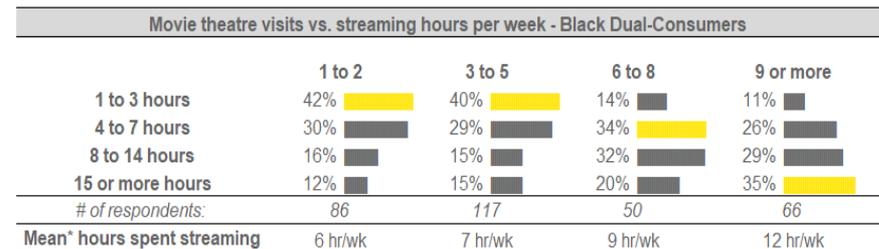
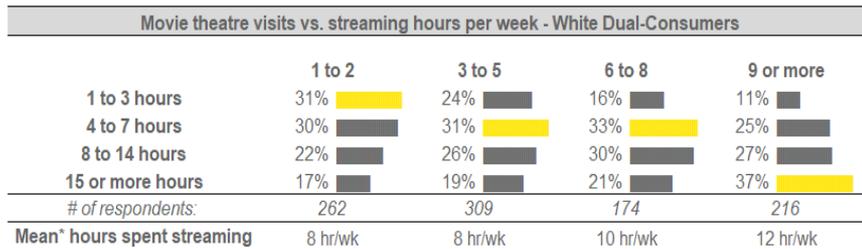
*Of those who did not visit a movie theatre at all in the last 12 months, about 24% streamed online content for 8 or more hours per week.*

Note: Figures may not appear to sum due to rounding.

\*Means are reported as 95% trimmed means.

# II: Movie theatre attendance and streaming consumption, dual-consumers by race/ethnicity

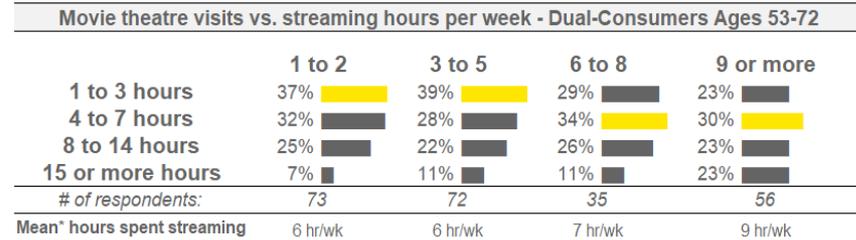
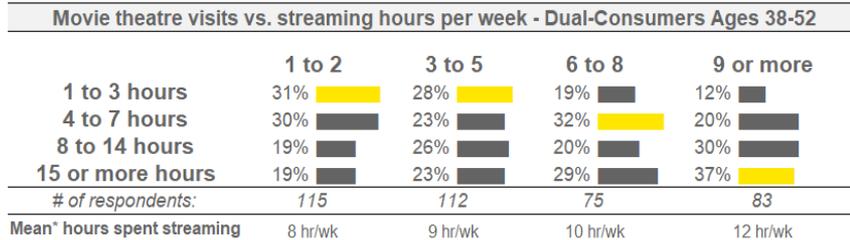
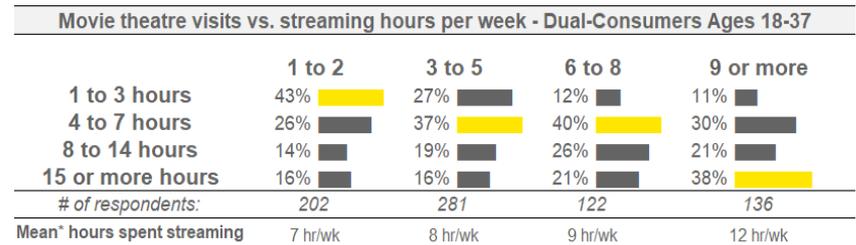
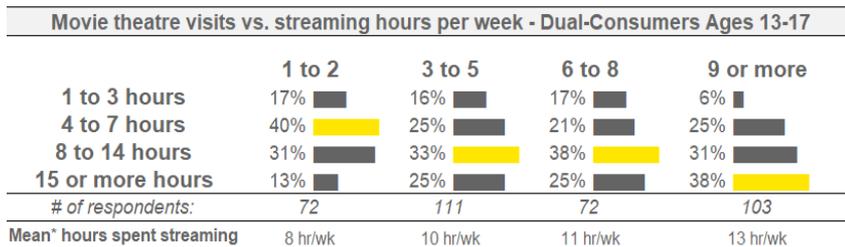
The positive relationship between movie theatre attendance and streaming consumption is strong across all races/ethnicities - the mean hours spent streaming per week generally increases with the number of movie theatre visits in the last 12 months.



\*Means are reported as 95% trimmed means.

# II: Movie theatre attendance and streaming consumption, dual-consumers by age group

Across all age groups, those respondents that visited a movie theatre 9 or more times on average in the last 12 months also streamed at least 9 hours of online content per week.



\*Means are reported as 95% trimmed means.

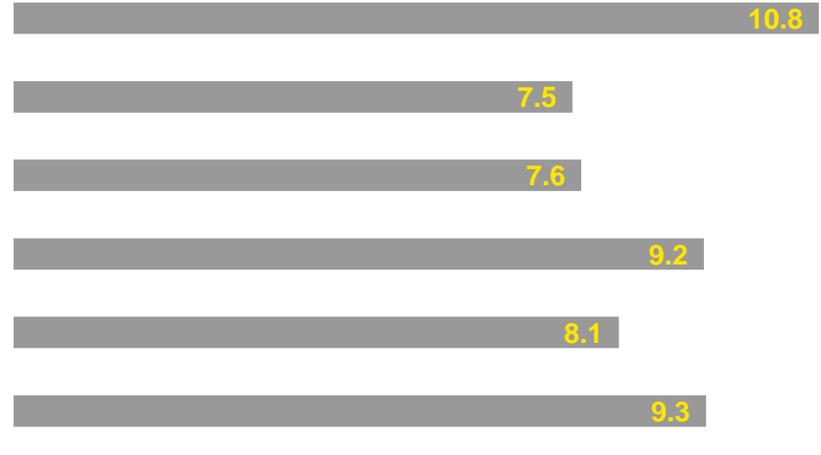
Note: Dual-Consumers ages 73+ are not shown as no movie attendance range includes more than six respondents.

# II: Movie theatre attendance and streaming consumption, dual-consumers by race

Mean\* movie visits over the last 12 months



Mean\* hours spent streaming per week over the last 12 months



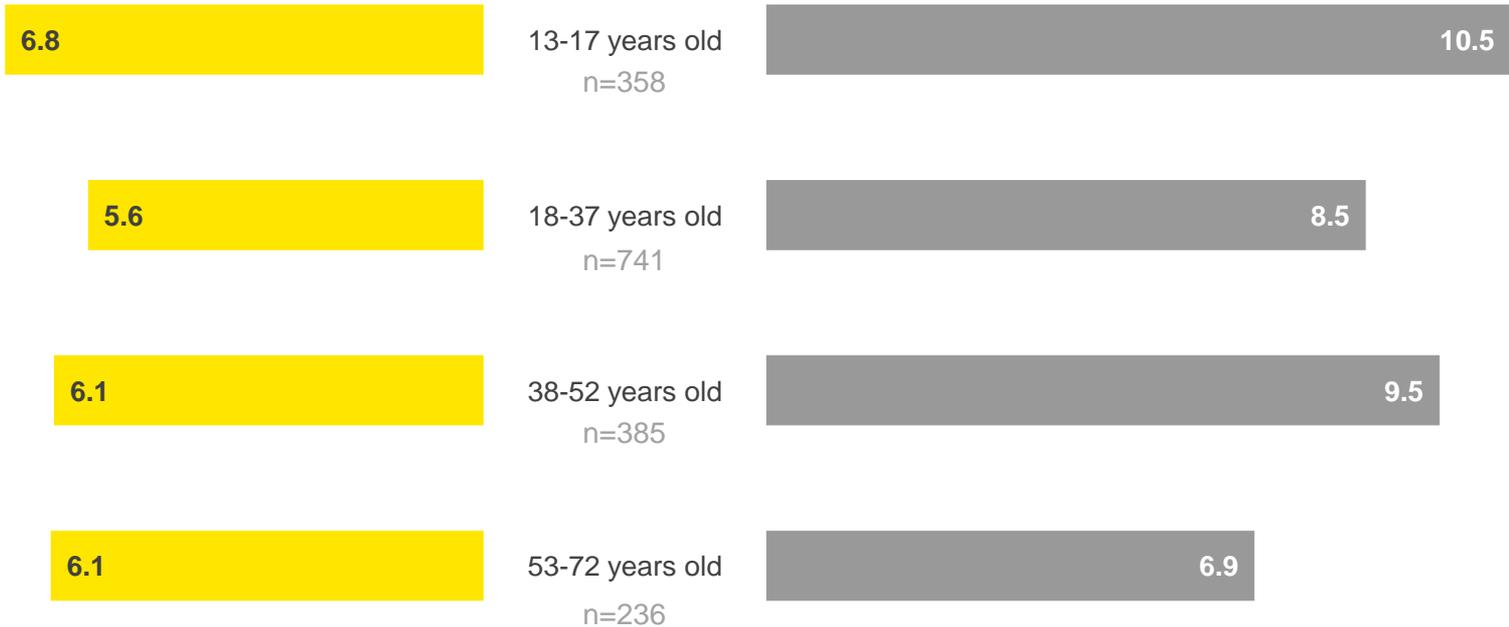
*These results have not changed significantly from earlier iteration of the survey. See slide 33.*

\*Means are reported as 95% trimmed means.

# II: Movie theatre attendance and streaming consumption, dual-consumers by age

Mean\* movie visits over the last 12 months

Mean\* hours spent streaming per week over the last 12 months



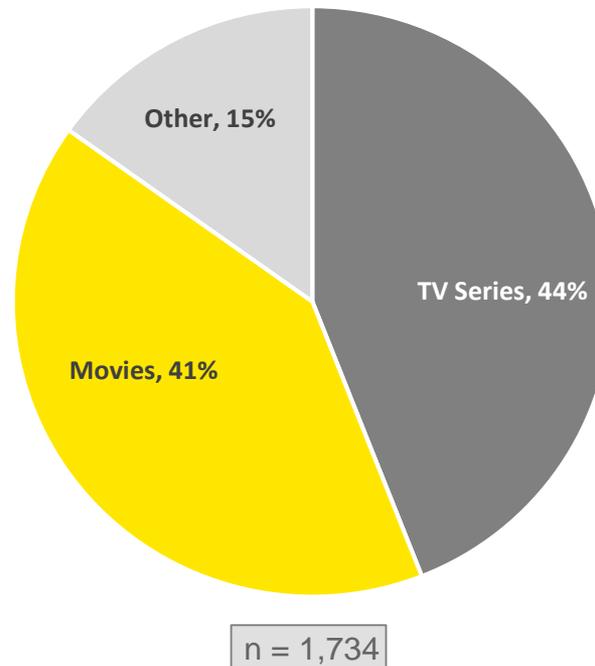
*These results have not changed significantly from earlier iteration of the survey. See slide 34.*

\*Means are reported as 95% trimmed means.

# II: Streaming content, dual-consumers

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Of the time you spent streaming, what percentage of the time would you say you spent streaming the following content?

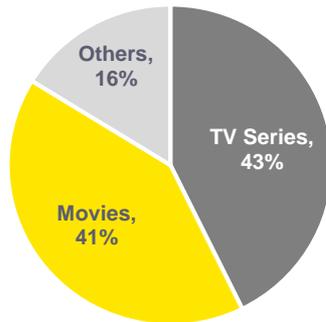


Note: The streaming content groups were described to respondents as the following:  
TV Series - a group of episodes of a television program released simultaneously or broadcasted in regular intervals  
Movies - films/motion pictures usually anywhere from 1-3 hours in length  
Other - sports, comedy specials, etc.

# II: Streaming content, dual-consumers by movie theatre attendance

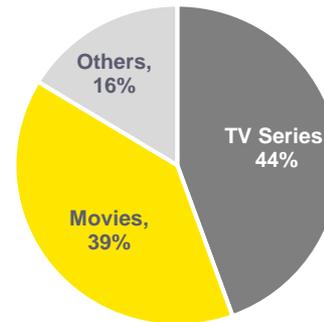
Of the time you spent streaming, what percentage of the time would you say you spent streaming the following content?

Respondents who visited a movie theatre 1 to 2 times in the last 12 months



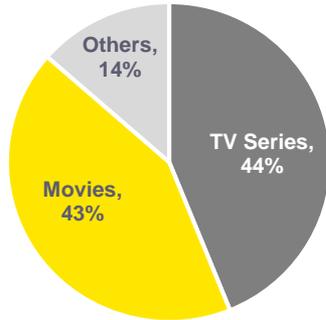
n = 468

Respondents who visited a movie theatre 3 to 5 times in the last 12 months



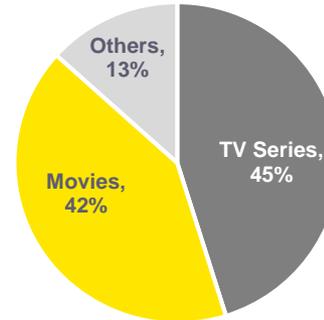
n = 579

Respondents who visited a movie theatre 6 to 8 times in the last 12 months



n = 305

Respondents who visited a movie theatre 9 or more times in the last 12 months



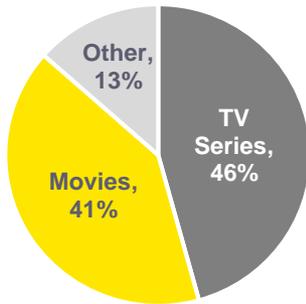
n = 382

Note: Figures may not appear to sum to 100% due to rounding.

# II: Streaming content, dual-consumers by race

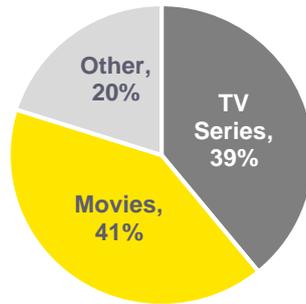
Of the time you spent streaming, what percentage of the time would you say you spent streaming the following content?

White Dual-Consumers



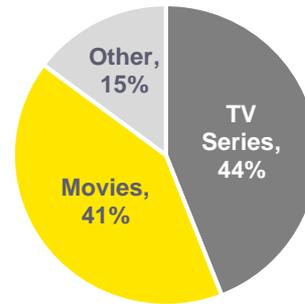
n = 961

Black Dual-Consumers



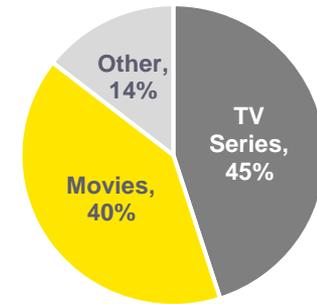
n = 319

Asian Dual-Consumers



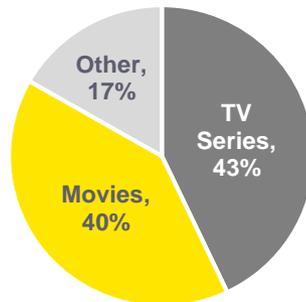
n = 139

Multi-race Dual-Consumers



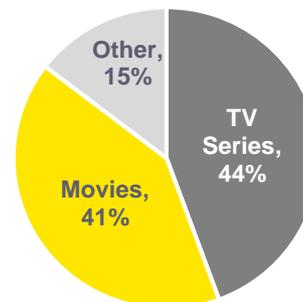
n = 270

Hispanic Dual-Consumers



n = 443

Non-Hispanic Dual-Consumers



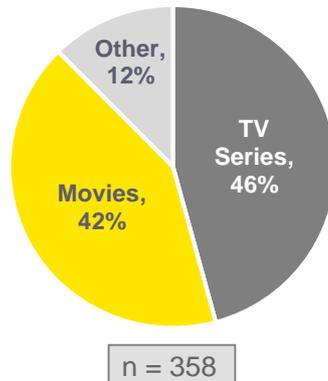
n = 1,291

Note: Figures may not appear to sum to 100% due to rounding.

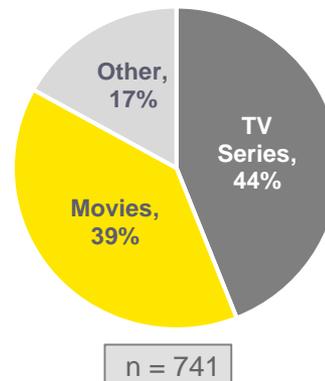
# II: Streaming content, dual-consumers by age group

Of the time you spent streaming, what percentage of the time would you say you spent streaming the following content?

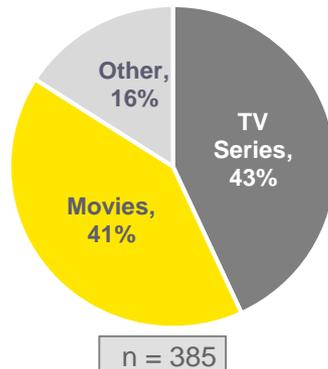
Dual-Consumers Ages 13-17



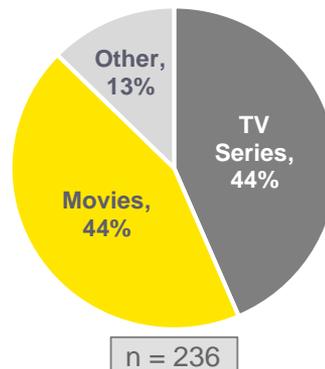
Dual-Consumers Ages 18-37



Dual-Consumers Ages 38-52



Dual-Consumers Ages 53-72



Note: Figures may not appear to sum to 100% due to rounding.

# III: Quadrant Analysis: Segmenting dual-consumers into four quadrants

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1

## Low Movie/Low Streaming

≤ 3 movies in last 12 months  
≤ 4 hours/week streaming online content

n = 322

2

## High Movie/Low Streaming

≥ 7 movies in last 12 months  
≤ 4 hours/week streaming online content

n = 122

3

## Low Movie/High Streaming

≤ 3 movies in last 12 months  
≥ 11 hours/week streaming online content

n = 154

4

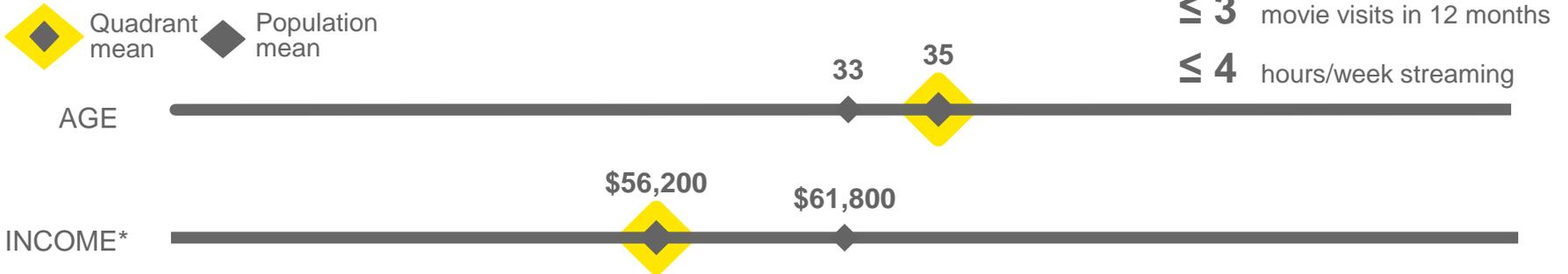
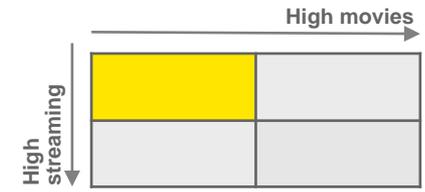
## High Movie/High Streaming

≥ 7 movies in last 12 months  
≥ 11 hours/week streaming online content

n = 213

Note: Only 811 of the 1,734 dual-consumers fall into one of the four quadrants. The remaining 923 dual-consumers reported 4 to 6 movie theatre visits and 5 to 10 hours of streaming online content.

# Low-movie/Low-streaming: Quadrant profile



### Race

<ul style="list-style-type: none"> <li>• <b>Quadrant</b></li> <li>• White: 47%</li> <li>• Black: 24%</li> <li>• Asian: 10%</li> <li>• Native-American: 3%</li> <li>• Pacific-Islander: 1%</li> <li>• Multi-race: 15%</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Population</b></li> <li>• White: 55%</li> <li>• Black: 18%</li> <li>• Asian: 8%</li> <li>• Native-American: 1%</li> <li>• Pacific-Islander: 1%</li> <li>• Multi-race: 16%</li> </ul>
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### Gender

- **Quadrant:** 52% male, 48% female
- **Population:** 50% male, 50% female

### Internet

- **Quadrant:** 84% at-home, 81% mobile
- **Population:** 92% at-home, 87% mobile

### Hispanic Origin

- **Quadrant:** 29% Hispanic
- **Population:** 26% Hispanic

### Marital Status\*\*

- **Quadrant:** 46% have never been married
- **Population:** 40% have never been married

### Children\*\*

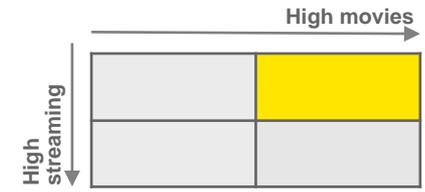
- **Quadrant:** 41% w/ at least one child under 17
- **Population:** 44% w/ at least one child under 17

### # of respondents

**322** (19% of 1,734)

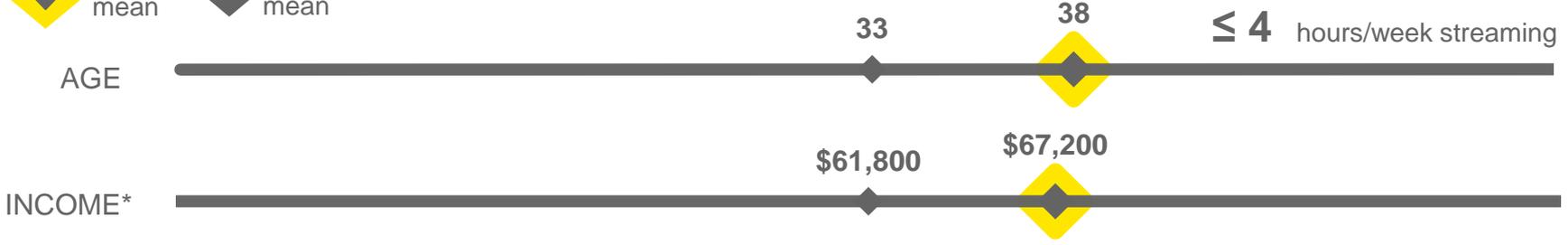
\*Reported as 95% trimmed mean; only 18+ years old respondents were asked to report income.  
 \*\*only 18+ years old respondents were asked to report marital status, and number of children.

# High-movie/Low-streaming: Quadrant profile



◆ Quadrant mean    ◆ Population mean

$\geq 7$  movie visits in 12 months  
 $\leq 4$  hours/week streaming



### Race

Quadrant	Population
White: 57%	White: 55%
Black: 14%	Black: 18%
Asian: 14%	Asian: 8%
Native-American: 0%	Native-American: 1%
Pacific-Islander: 0%	Pacific-Islander: 1%
Multi-race: 16%	Multi-race: 16%

### Gender

- **Quadrant:** 57% male, 43% female
- **Population:** 50% male, 50% female

### Internet

- **Quadrant:** 95% at-home, 82% mobile
- **Population:** 92% at-home, 87% mobile

### Hispanic Origin

- **Quadrant:** 20% Hispanic
- **Population:** 26% Hispanic

### Marital Status\*\*

- **Quadrant:** 43% have never been married
- **Population:** 40% have never been married

### Children\*\*

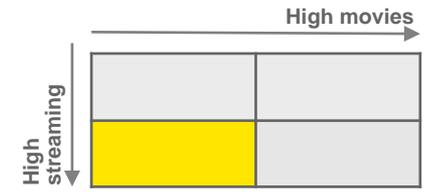
- **Quadrant:** 28% w/ at least one child under 17
- **Population:** 44% w/ at least one child under 17

### # of respondents

122 (7% of 1,734)

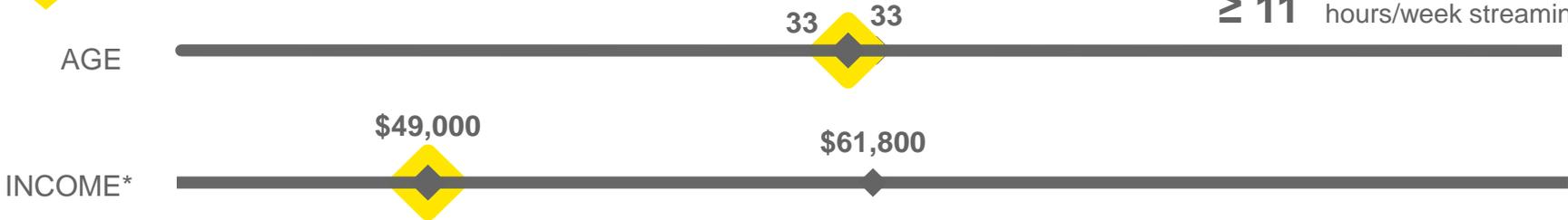
\*Reported as 95% trimmed mean; only 18+ years old respondents were asked to report income.  
 \*\*only 18+ years old respondents were asked to report marital status, and number of children.

# Low-movie/High-streaming: Quadrant profile



Quadrant mean Population mean

≤ 3 movie visits in 12 months  
≥ 11 hours/week streaming



### Race

<ul style="list-style-type: none"> <li>• <b>Quadrant</b></li> <li>• White: 60%</li> <li>• Black: 16%</li> <li>• Asian: 9%</li> <li>• Native-American: 0%</li> <li>• Pacific-Islander: 1%</li> <li>• Multi-race: 14%</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Population</b></li> <li>• White: 55%</li> <li>• Black: 18%</li> <li>• Asian: 8%</li> <li>• Native-American: 1%</li> <li>• Pacific-Islander: 1%</li> <li>• Multi-race: 16%</li> </ul>
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### Gender

- **Quadrant:** 39% male, 61% female
- **Population:** 50% male, 50% female

### Internet

- **Quadrant:** 94% at-home, 85% mobile
- **Population:** 92% at-home, 87% mobile

### Hispanic Origin

- **Quadrant:** 19% Hispanic
- **Population:** 26% Hispanic

### Marital Status\*\*

- **Quadrant:** 43% have never been married
- **Population:** 40% have never been married

### Children\*\*

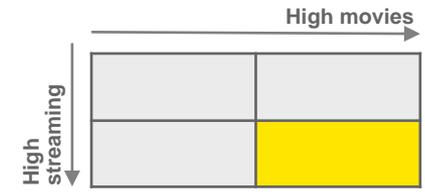
- **Quadrant:** 48% w/ at least one child under 17
- **Population:** 44% w/ at least one child under 17

### # of respondents

**154** (9% of 1,734)

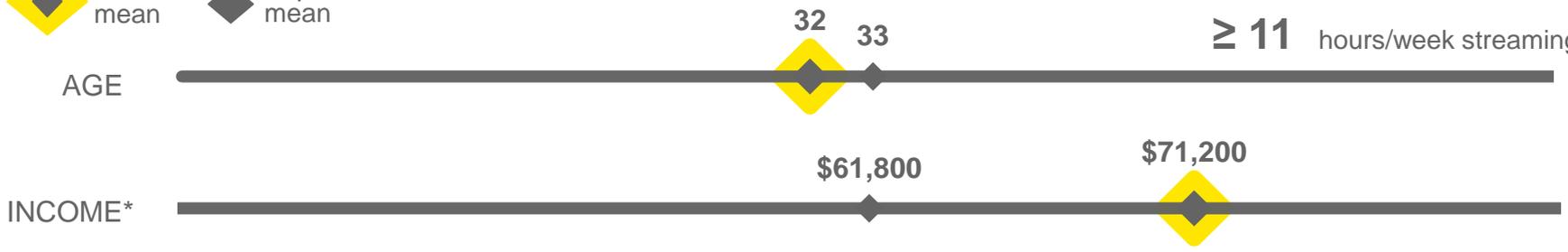
\*Reported as 95% trimmed mean; only 18+ years old respondents were asked to report income.  
\*\*only 18+ years old respondents were asked to report marital status, and number of children.

# High-movie/High-streaming: Quadrant profile



Quadrant mean Population mean

≥ 7 movie visits in 12 months  
≥ 11 hours/week streaming



### Race

<ul style="list-style-type: none"> <li>• <b>Quadrant</b></li> <li>• White: 57%</li> <li>• Black: 17%</li> <li>• Asian: 7%</li> <li>• Native-American: 2%</li> <li>• Pacific-Islander: 3%</li> <li>• Multi-race: 15%</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Population</b></li> <li>• White: 55%</li> <li>• Black: 18%</li> <li>• Asian: 8%</li> <li>• Native-American: 1%</li> <li>• Pacific-Islander: 1%</li> <li>• Multi-race: 16%</li> </ul>
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### Gender

- **Quadrant:** 51% male, 49% female
- **Population:** 50% male, 50% female

### Internet

- **Quadrant:** 98% at-home, 92% mobile
- **Population:** 92% at-home, 87% mobile

### Hispanic Origin

- **Quadrant:** 26% Hispanic
- **Population:** 26% Hispanic

### Marital Status\*\*

- **Quadrant:** 38% have never been married
- **Population:** 40% have never been married

### Children\*\*

- **Quadrant:** 50% w/ at least one child under 17
- **Population:** 44% w/ at least one child under 17

### # of respondents

**213** (12% of 1,734)

\*Reported as 95% trimmed mean; only 18+ years old respondents were asked to report income.  
\*\*only 18+ years old respondents were asked to report marital status, and number of children.



# IV: Impact of in-theatre movie release on streaming behavior

Streaming services typically offer a mix of movies to their subscribers, some of which have been released previously in movie theaters and others which have not. Thinking about movies you watch using a streaming service, how often are you aware of whether or not the movie was released in a movie theater?

Response	Percentage	
Always	16%	
Usually	35%	
Sometimes	28%	
Rarely	8%	
Never	13%	
<b>Total</b>	<b>100.0%</b>	
<i>Sample Size</i>	2,520	

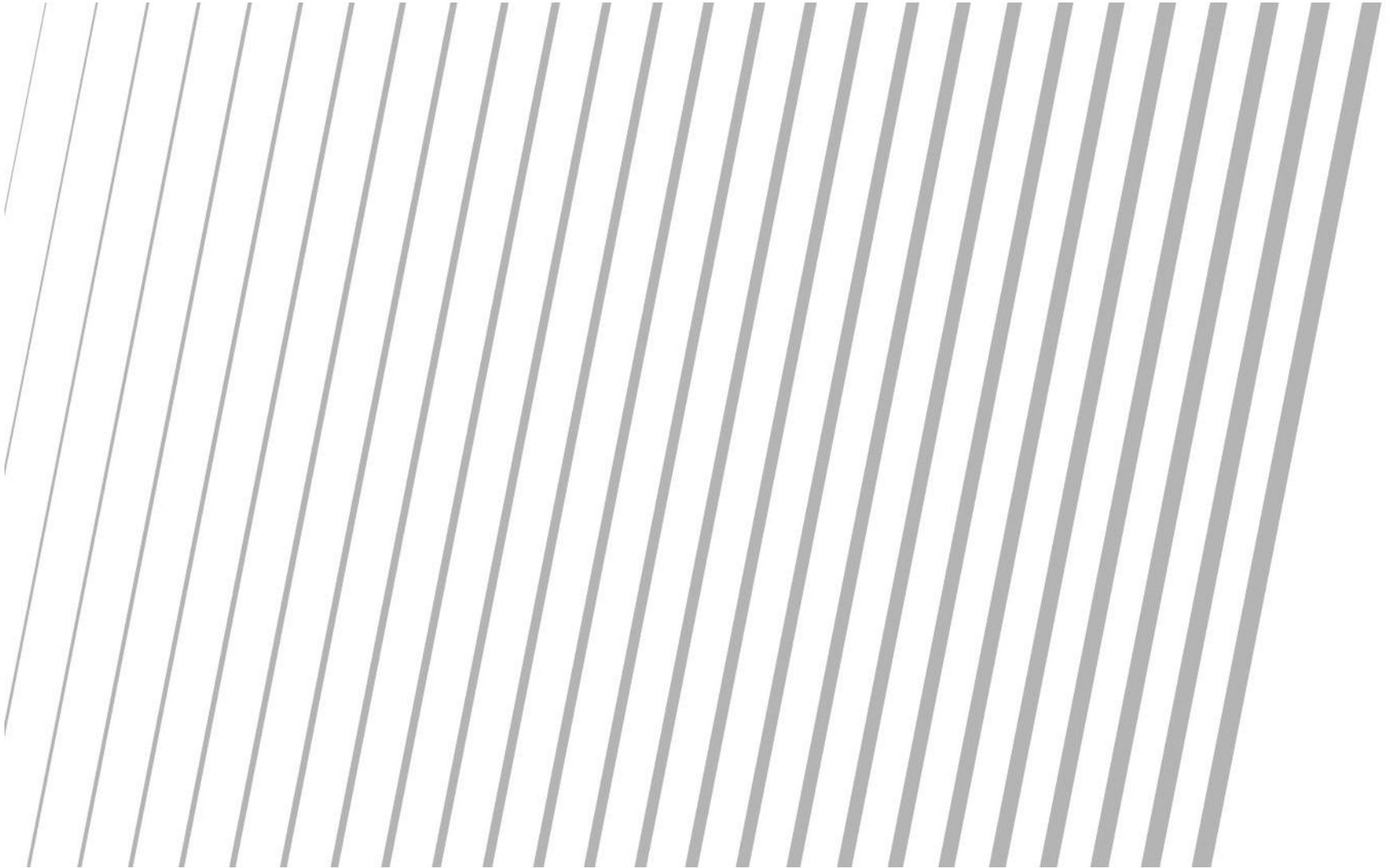
Respondents that were aware of movies' in-theatre releases were more likely to stream a movie when they knew it was released in theatres.

	Always or Usually	Sometimes or Rarely	Total
I am <u>more likely</u> to stream a movie if I know it has been released in a movie theatre	62%	40%	53%
My decision to stream a movie is not impacted by knowing whether it has been released in a movie theatre	35%	51%	42%
I am <u>less likely</u> to stream a movie if I know it has been released in a movie theatre	3%	9%	6%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
<i>Sample size</i>	1,286	905	2,191

Note: Results presented include 2,191 respondents who indicated that they were, in some capacity (rarely, sometimes, usually, always), aware of whether the movie they streamed was released in a movie theatre. Respondents who reported that they were slightly, somewhat, or much more likely were grouped together as respondents who were more likely to stream a movie if they knew it was release in a movie theatre. Similarly, respondents who reported that they were slightly, somewhat, or much less likely were grouped together as respondents who were less likely to stream a movie if they knew it was released in theatres. Table may not sum due to rounding.

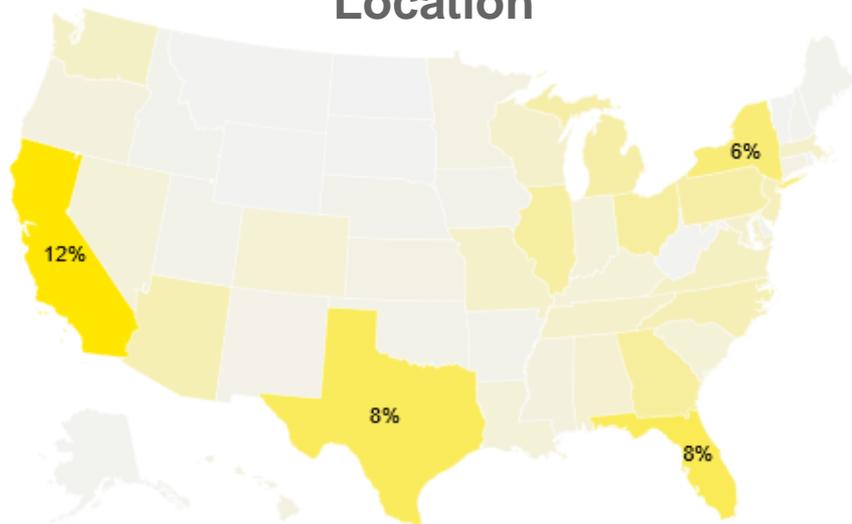
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# A: Demographics

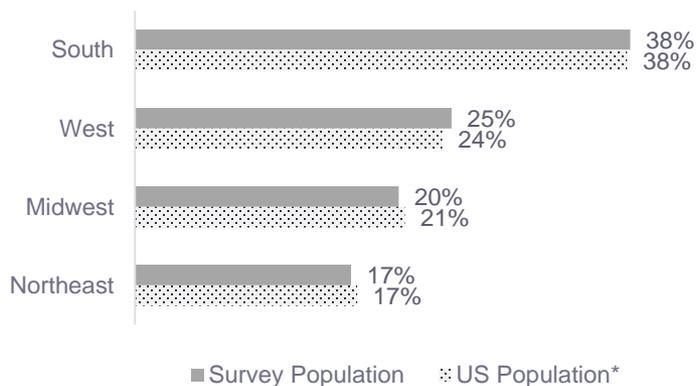


# Demographics of dual-consumers

## Location

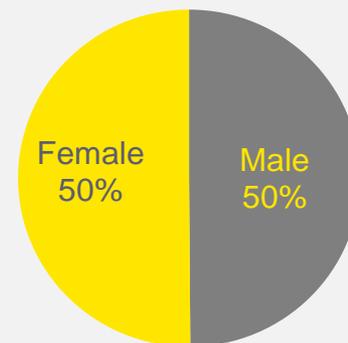


## Population Breakdown by Region

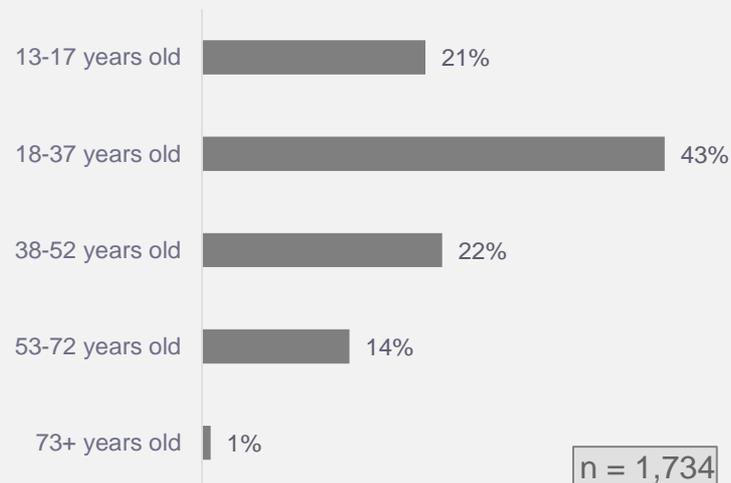


\*Source: US Census Bureau 2018 state population estimates

## Gender

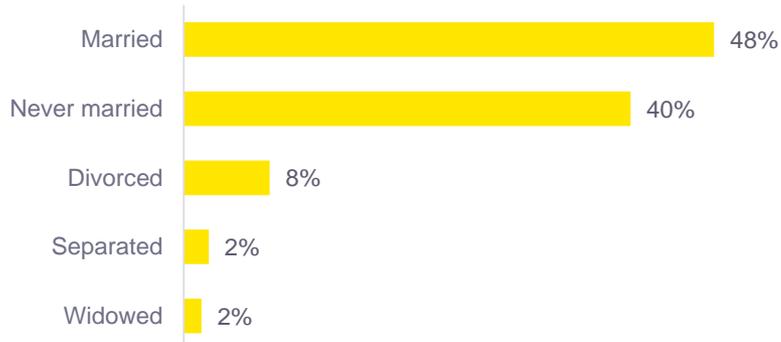


## Generation

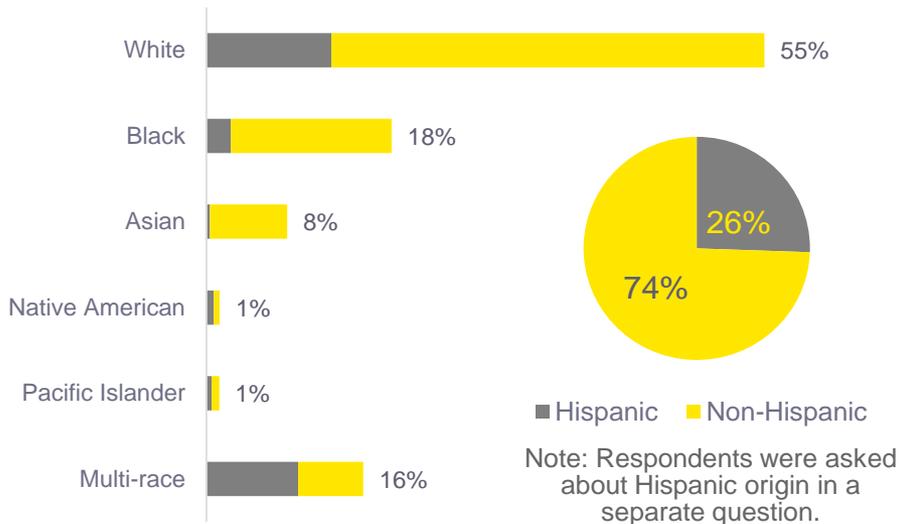


# Demographics of dual-consumers

## Marital Status\*

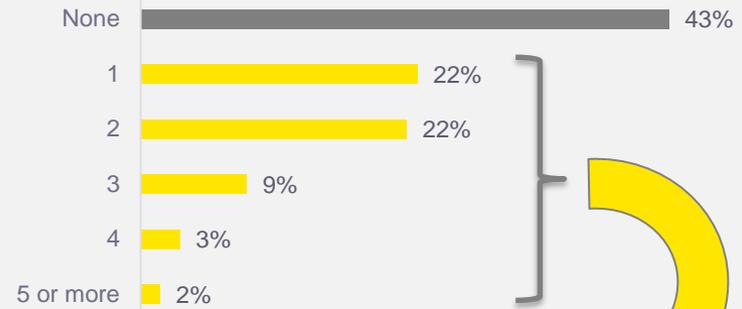


## Race



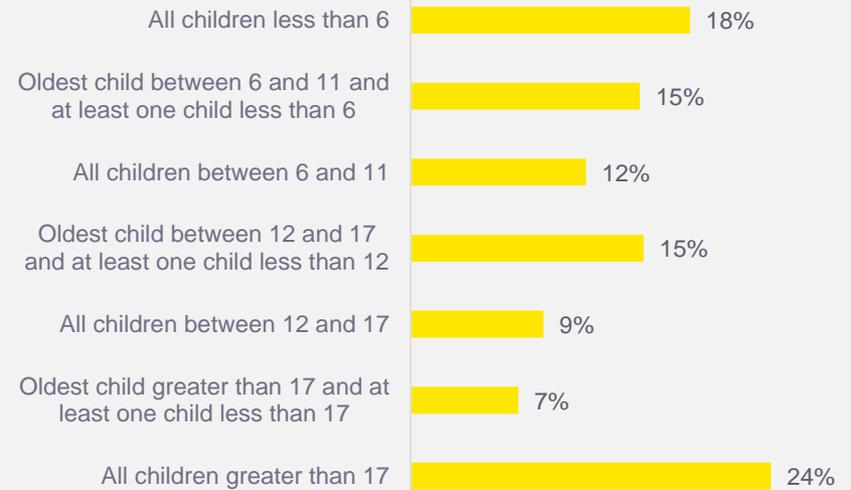
n = 1,734

## Number of Children\*



## Age of Children

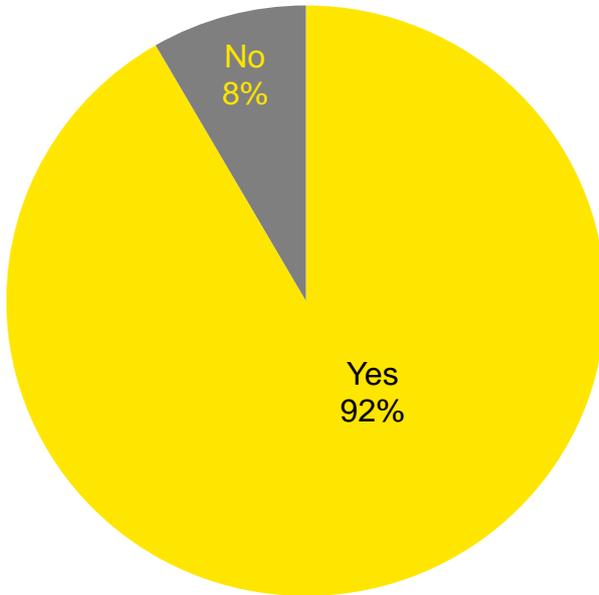
n = 788



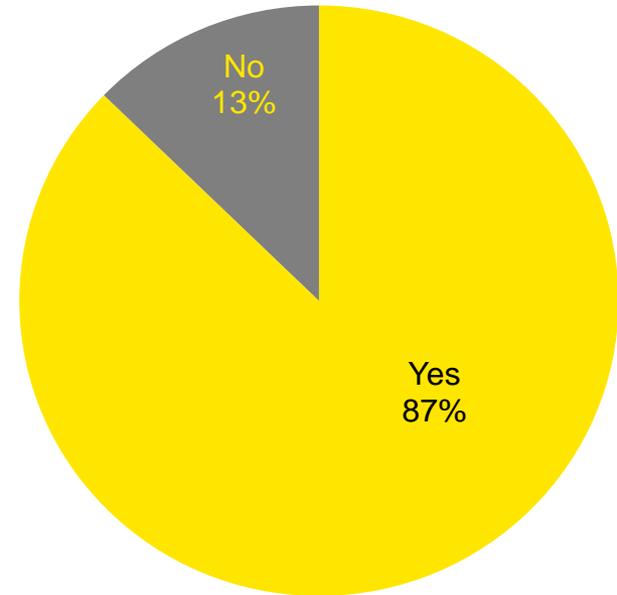
\*only 18+ years old respondents were asked to report marital status, and number of children.

# Access to high-speed internet

Access to wired high-speed internet at home



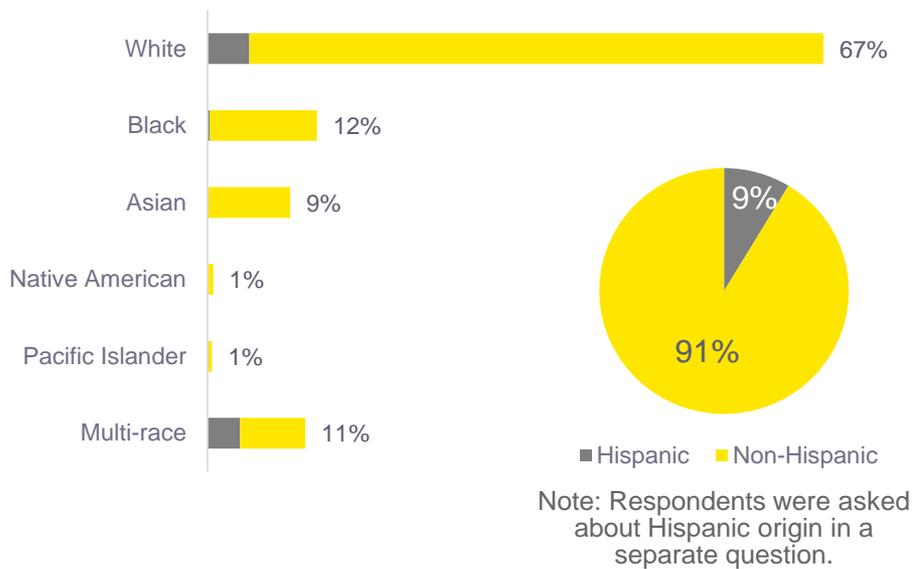
Access to wireless high-speed internet within household



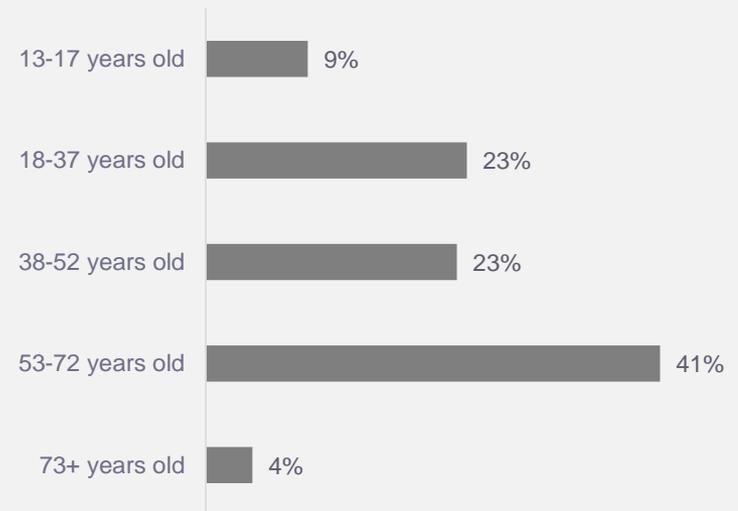
n = 1,734

# Demographics of non dual-consumers

## Race



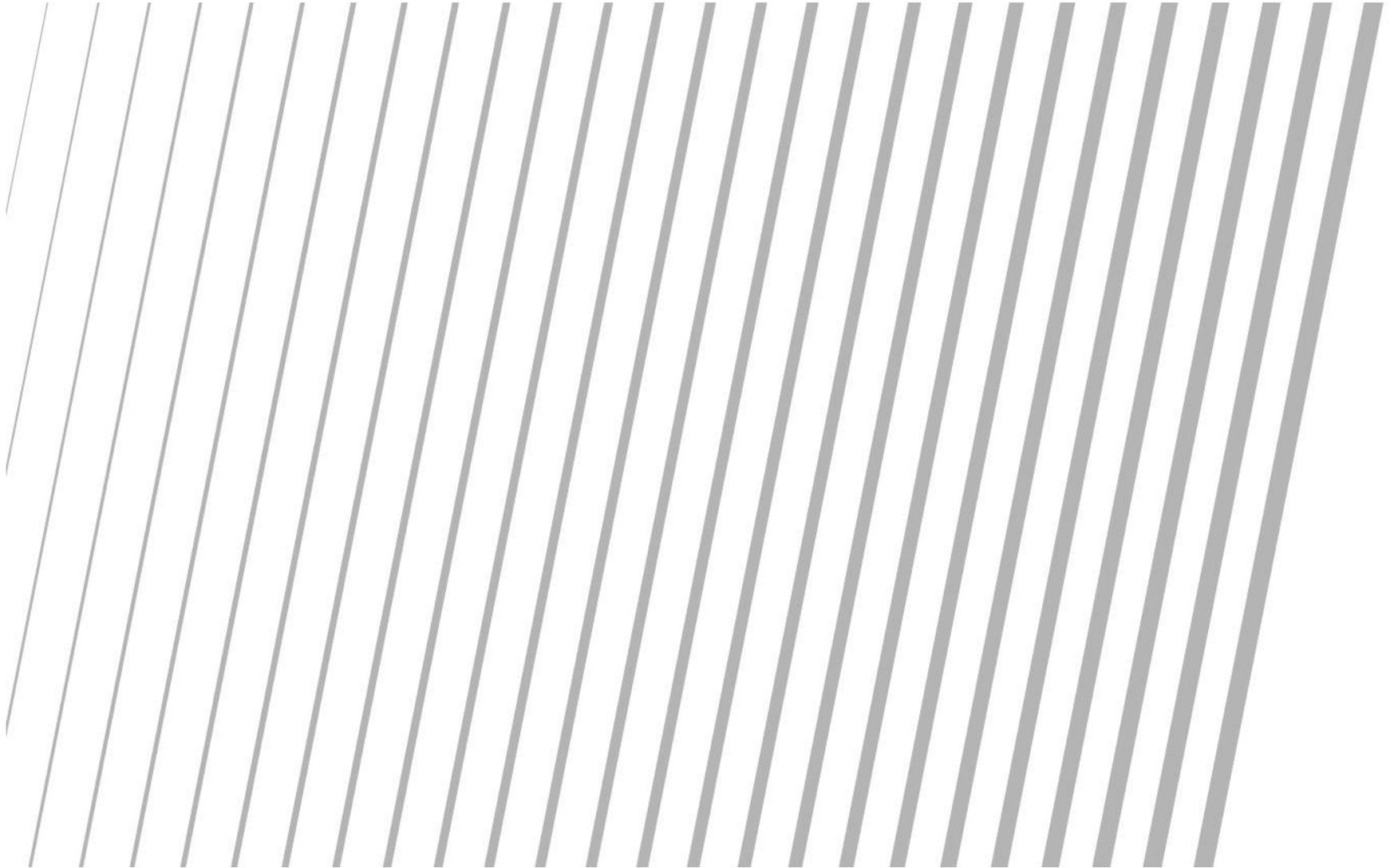
## Generation



n = 786

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# B: Methodology



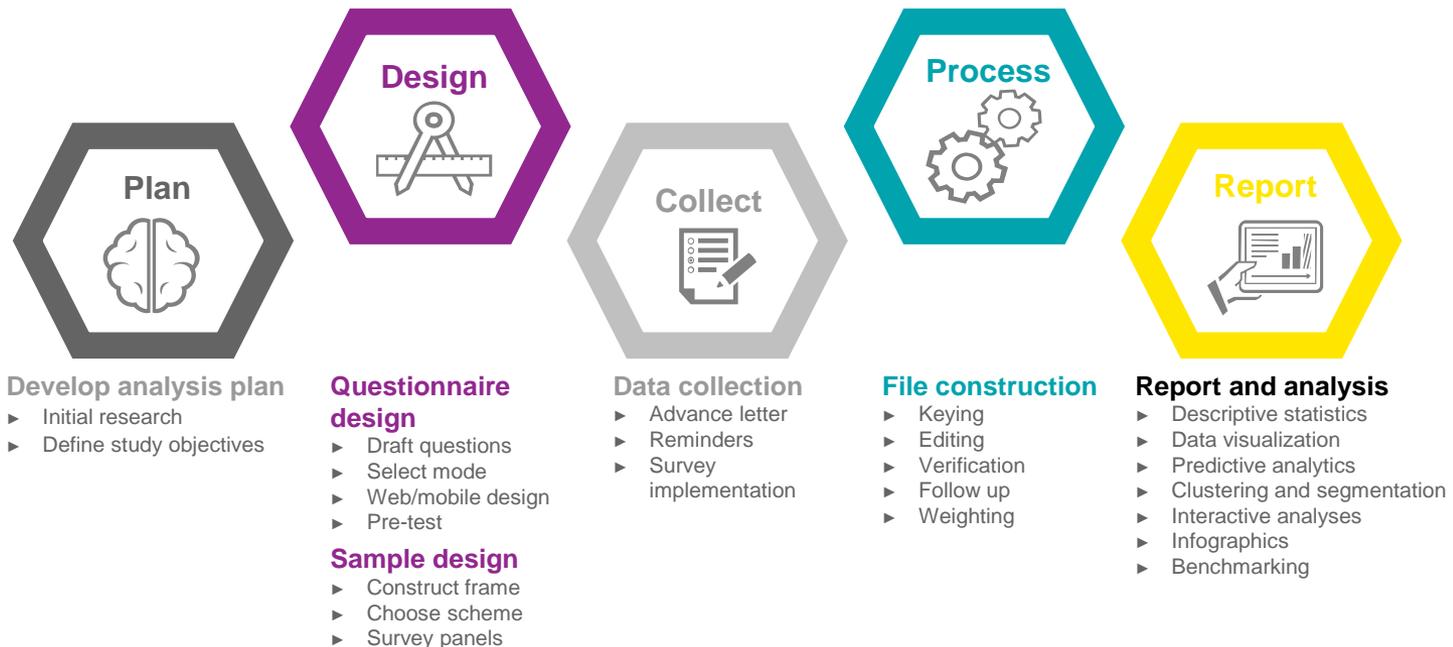
# Survey quality

Two main types of error are considered in survey research; variable and systematic errors. **Variable errors** are the cumulative effect of the total error for a particular observation, either positive or negative. When the frequency of variable error is high, the data are often referred to as 'noisy', since variable error limits our ability to understand what the data are telling us. **Systematic errors** arise from faults in the measurement process; these errors lead to bias.

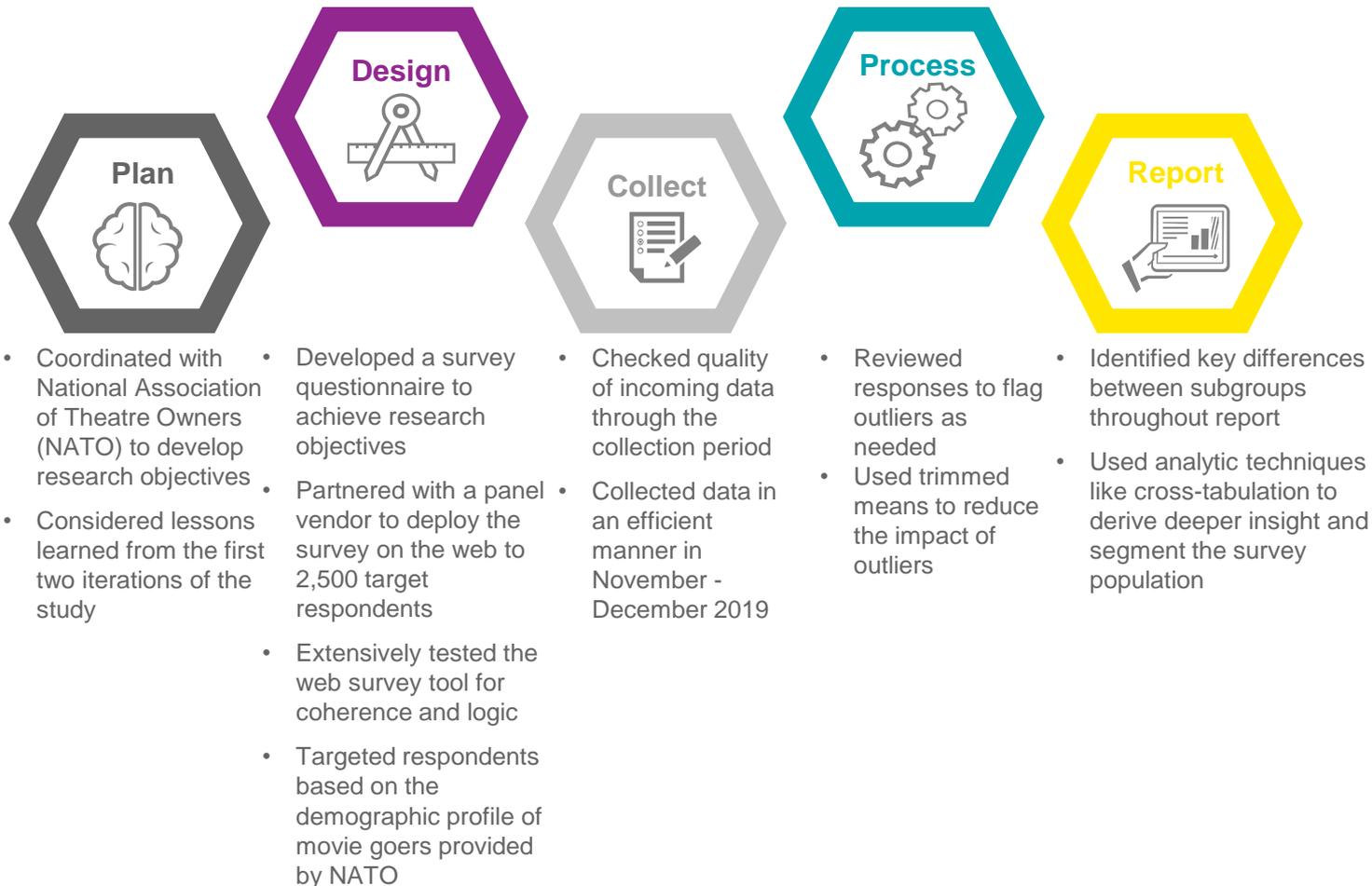
Variable errors are unavoidable, but can be reduced using appropriate techniques of statistical inference. Systematic errors can be reduced by making improvements to the survey process – these errors are the chief focus of our survey quality process.

Survey error can also be classified by its two main sources – sampling error and non-sampling error. Sampling error arises from basing an estimate for the population value on a sample rather than the entire population. In general, sampling error contributes to increased variability in the data. It is measurable and often can be reduced by increasing the sample size or using more sophisticated sample designs.

Non-sampling errors are those arising from sources other than sampling. They tend to contribute to the systematic errors which can be mitigated through good survey practice. On the next page, we describe the steps we have taken to mitigate survey error at each of the five survey stages outlined in the figure below.



# Steps taken to mitigate survey error



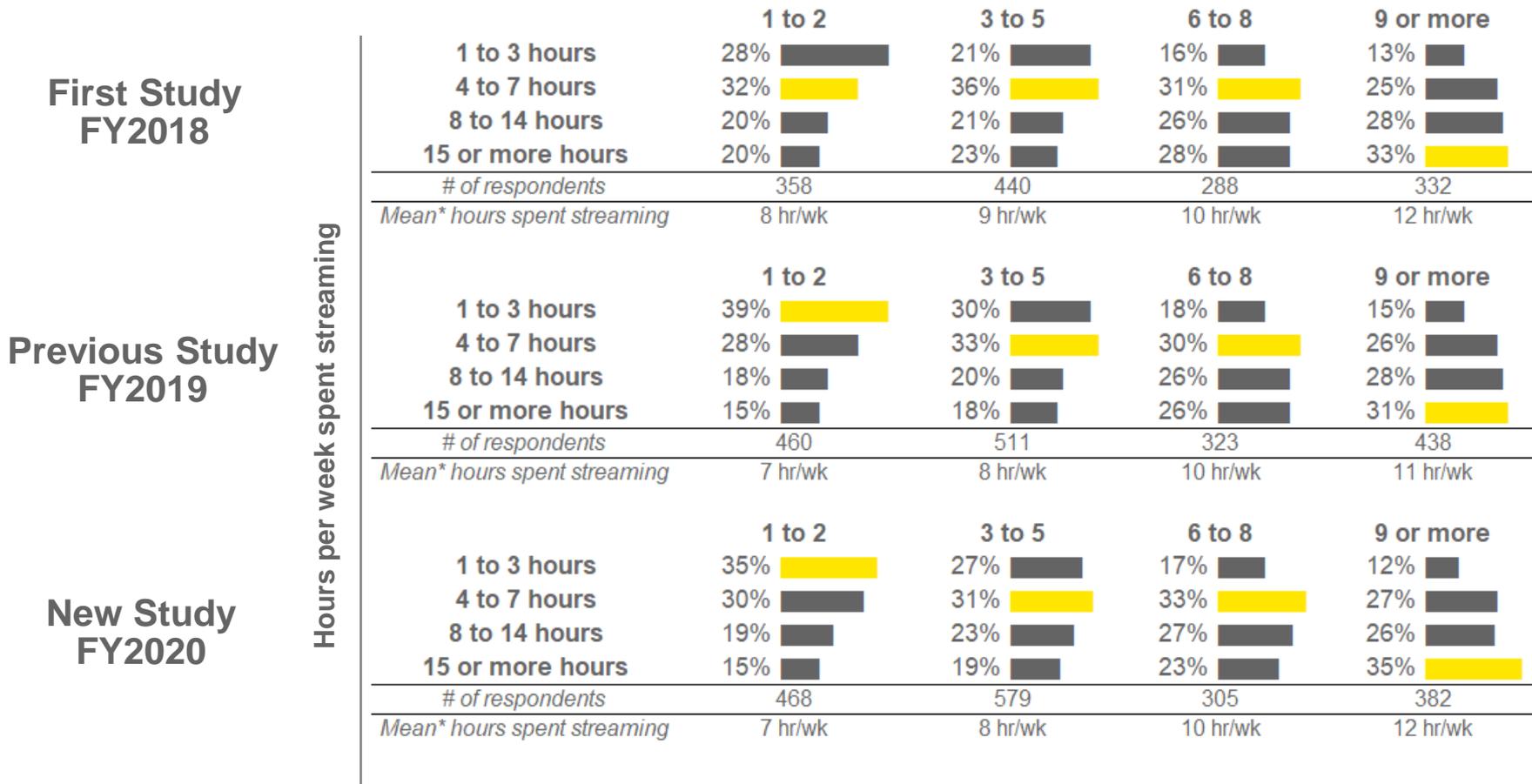
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# C: Study comparison



# Dual consumer movie theatre attendance and streaming consumption comparison

Number of visits to a movie theatre over the last 12 months



Note: Figures may not appear to sum due to rounding.  
 \*Means are reported as 95% trimmed means.



# Streaming behavior of non-moviegoers comparison

## First Study – FY2018

Online streaming behavior of those who did not visit a movie theatre in 2017

Did not stream	48%	
1 to 3 hours	13%	
4 to 7 hours	13%	
8 to 14 hours	11%	
15 or more hours	14%	
# of respondents	401	
Mean* hours spent streaming	5 hr/wk	

## Previous Study – FY2019

Online streaming behavior of those who did not visit a movie theatre in the last 12 months

Did not stream	49%	
1 to 3 hours	20%	
4 to 7 hours	14%	
8 to 14 hours	9%	
15 or more hours	9%	
# of respondents	500	
Mean* hours spent streaming	4 hr/wk	

## New Study – FY2020

Online streaming behavior of those who did not visit a movie theatre in the last 12 months

Did not stream	47%	
1 to 3 hours	17%	
4 to 7 hours	12%	
8 to 14 hours	12%	
15 or more hours	12%	
# of respondents	505	
Mean* hours spent streaming	4 hr/wk	

Of those who didn't visit a movie theatre in 2017, nearly half (48%) didn't stream any online content.

Of those who didn't visit a movie theatre in the last 12 months, nearly half (49%) didn't stream any online content.

Of those who didn't visit a movie theatre in the last 12 months, nearly half (47%) didn't stream any online content.

Of those who did not visit a movie theatre at all in 2017, only a quarter (25%) streamed online content for 8 or more hours per week.

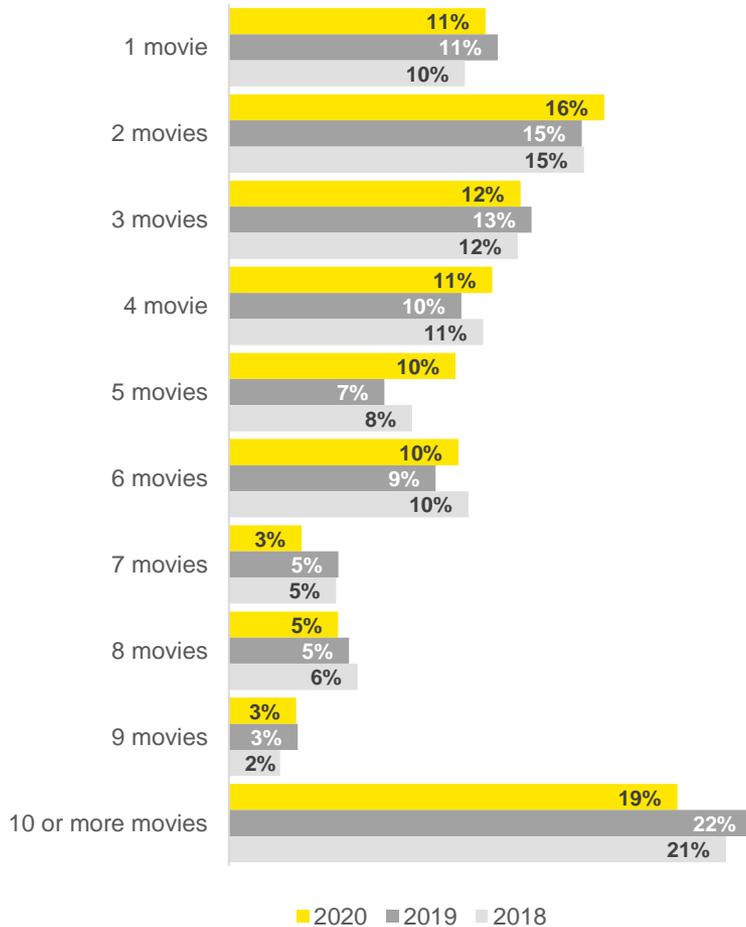
Of those who did not visit a movie theatre at all in the last 12 months, only 18% streamed online content for 8 or more hours per week.

Of those who did not visit a movie theatre at all in the last 12 months, only 23% streamed online content for 8 or more hours per week.

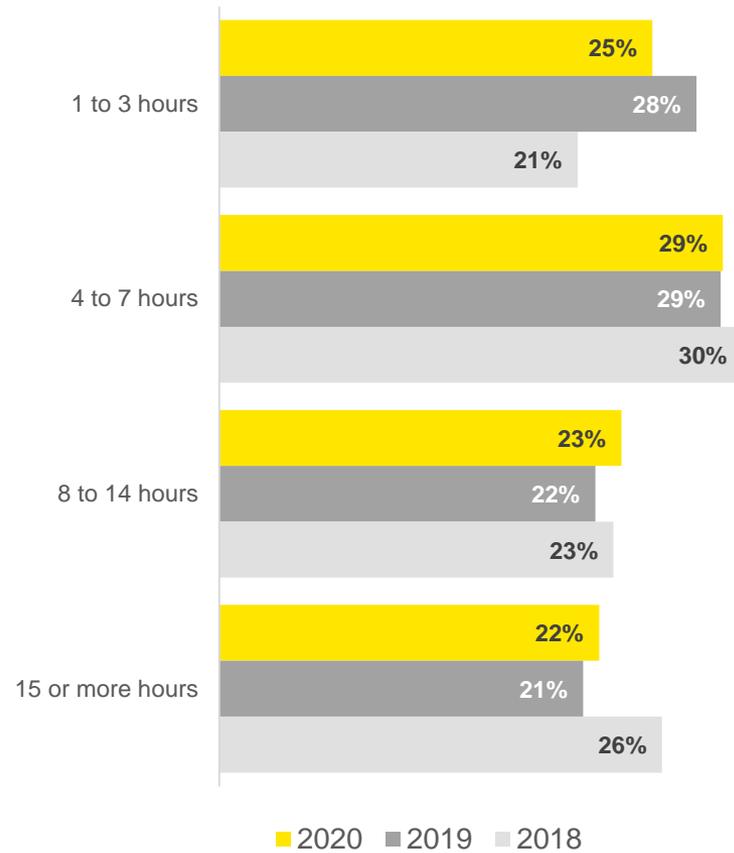
Note: Figures may not appear to sum due to rounding.  
\*Means are reported as 95% trimmed means.

# II: Movie theatre attendance and streaming consumption of dual consumers, FY2018-2020

During the last 12 months, about how many times did you go to the movies at theatres?

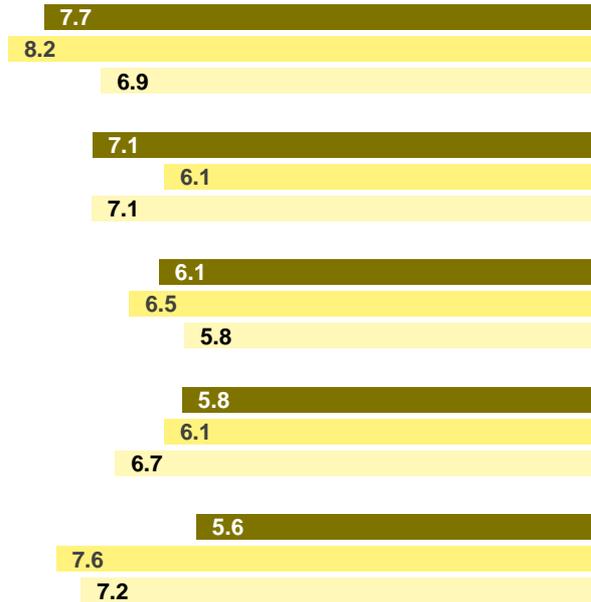


During the last 12 months, on average, how many hours per week would you say you spent streaming online-subscription content or downloads from any of the following services?

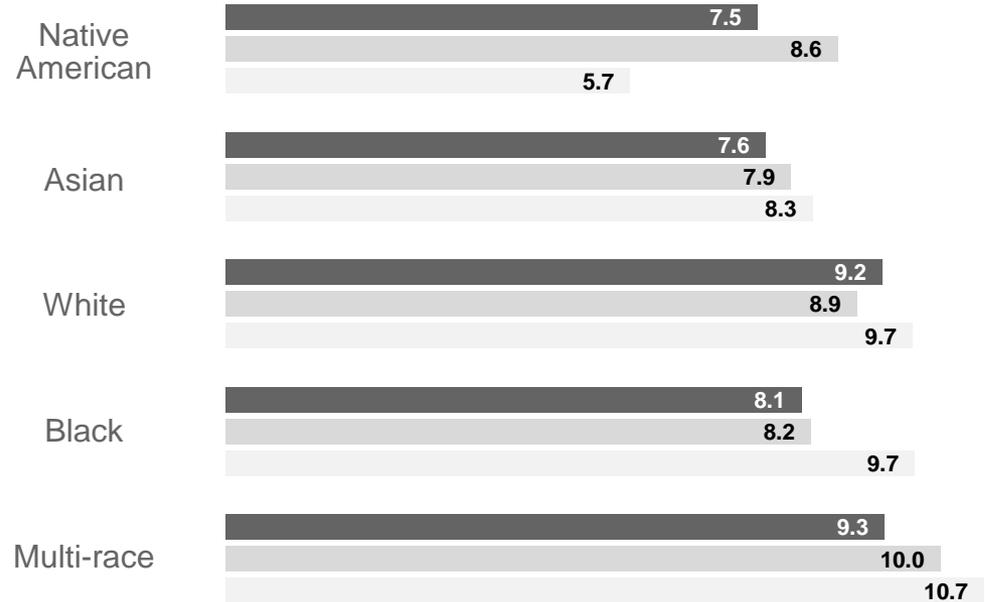


# II: Movie theatre attendance and streaming consumption, dual-consumers by race, FY2018-2020

Mean\* movie visits over the last 12 months



Mean\* hours spent streaming per week over the last 12 months

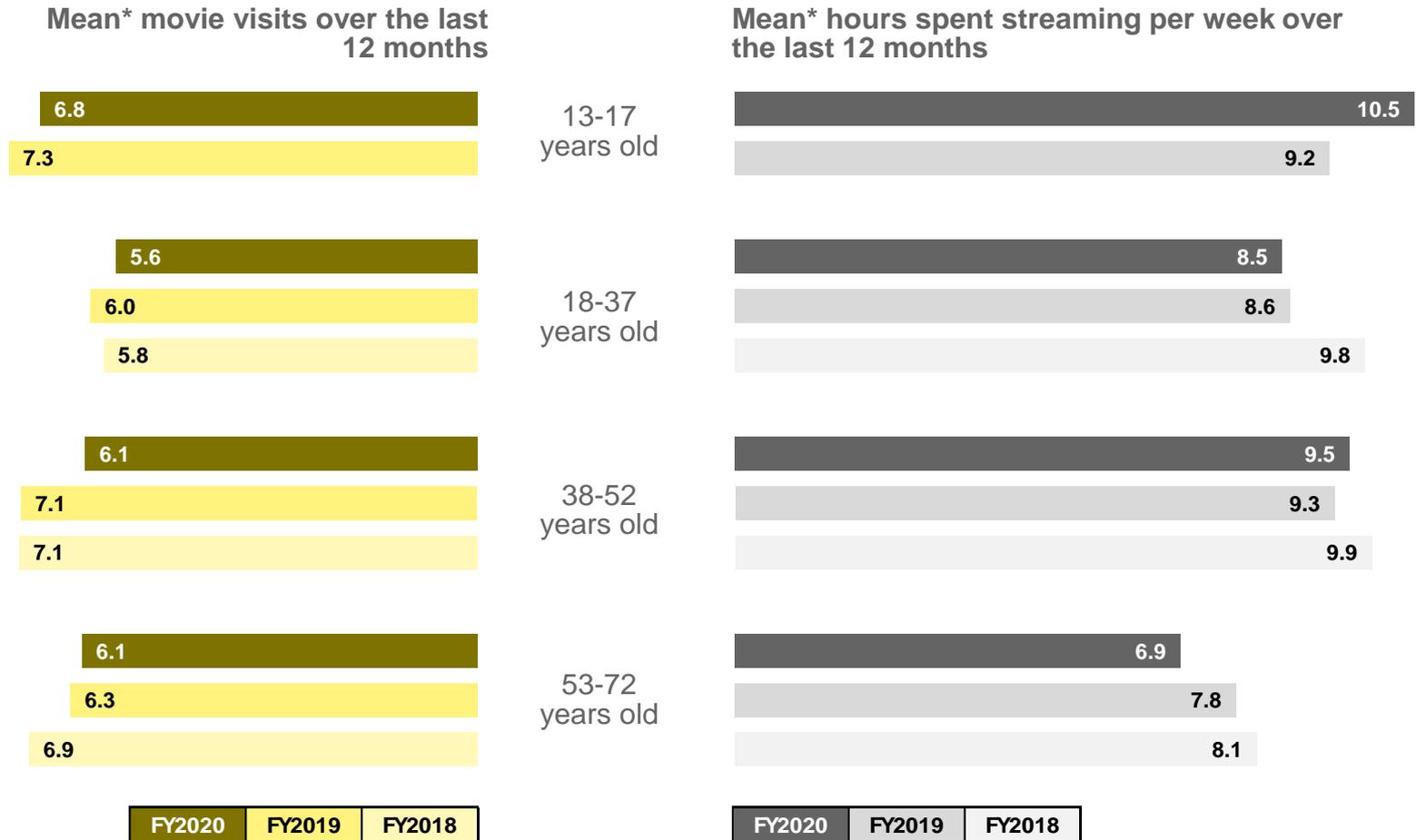


\*Means are reported as 95% trimmed means.

FY2020 FY2019 FY2018

FY2020 FY2019 FY2018

# II: Movie theatre attendance and streaming consumption, dual-consumers by age, FY2018-2020



Note: The FY2018 survey was only distributed to respondents ages 18 and above.  
 \*Means are reported as 95% trimmed means.