



CTV: FRIEND OR FOE OF TRADITIONAL TV?

Impact of CTV Device Introduction on TV
Viewing Households

CTV: Friend or Foe?

Objective

We had a few questions

1 What impact, if any, does the introduction of a CTV into a household have on linear TV viewing?

2 How do Broadcast, Cable and OTT TV viewing differ in heavy and light TV households?

3 Do changes in viewing differ by day part, genre, demos, children in household, and level of usage?

4 Which genres, if any, are affected by the introduction of CTV?

CTV: Friend or Foe?

Methodology: Phase I



PHASE I: DEVICE AUDIT SURVEY

This study was fielded online in the US from July 6, 2016 to July 18, 2016. The final data set was weighted on age, gender and income to ensure a balanced sample aligned with the same US population characteristics.



SAMPLE SIZES

A total of 2,402 responses were collected. Among those, 1,475 had a Connected TV (CTV) device in their household, including 845 with an Over-the-Top (OTT) device. The final data set was weighted on age, gender and income to align with the same US population characteristics.

In this study CTV and OTT devices include the following:

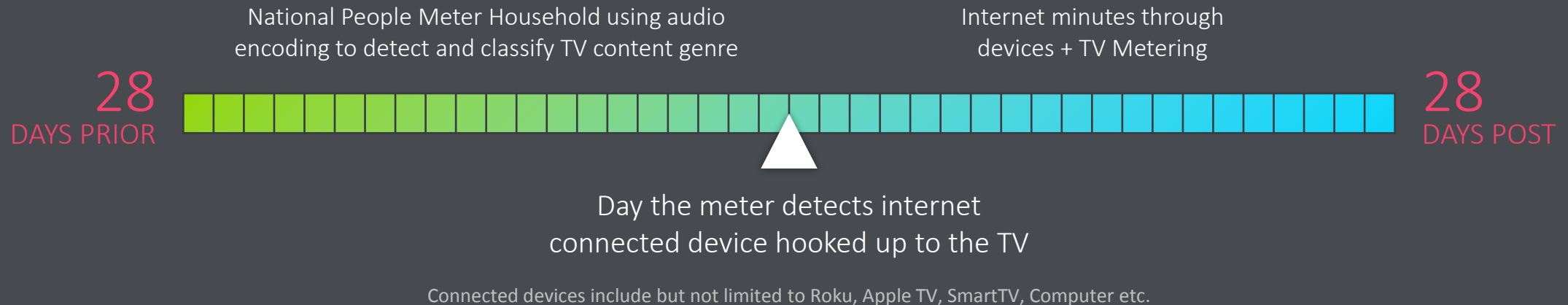
OTT Internet-to-TV devices like Roku, Apple TV, and Chromecast, and internet-connected Blu-ray players

CTV includes all OTT devices as well as Smart TVs and internet-connected game consoles

CTV In the Household Behavioral Analysis

Methodology: Phase II

1. Identify first broadcast date that National People Meter Household member was exposed to OTT content to mark “First OTT Viewing”
2. Identify eligible households with 28 days of HUT* TV tuning prior and post
3. TV and OTT usage quartiles based on average daily minutes
4. TV content genres identified by audio encoding



CTV: Friend or Foe?

Glossary

Metric

Description

Broadcast

Set is tuned to a broadcast station

Cable

Set is tuned to a Cable Network

Other*

Set is tuned to signal other than Broadcast or Cable (includes AOT, DVR, DVD, VCR. Gaming console activity is excluded)

OTT

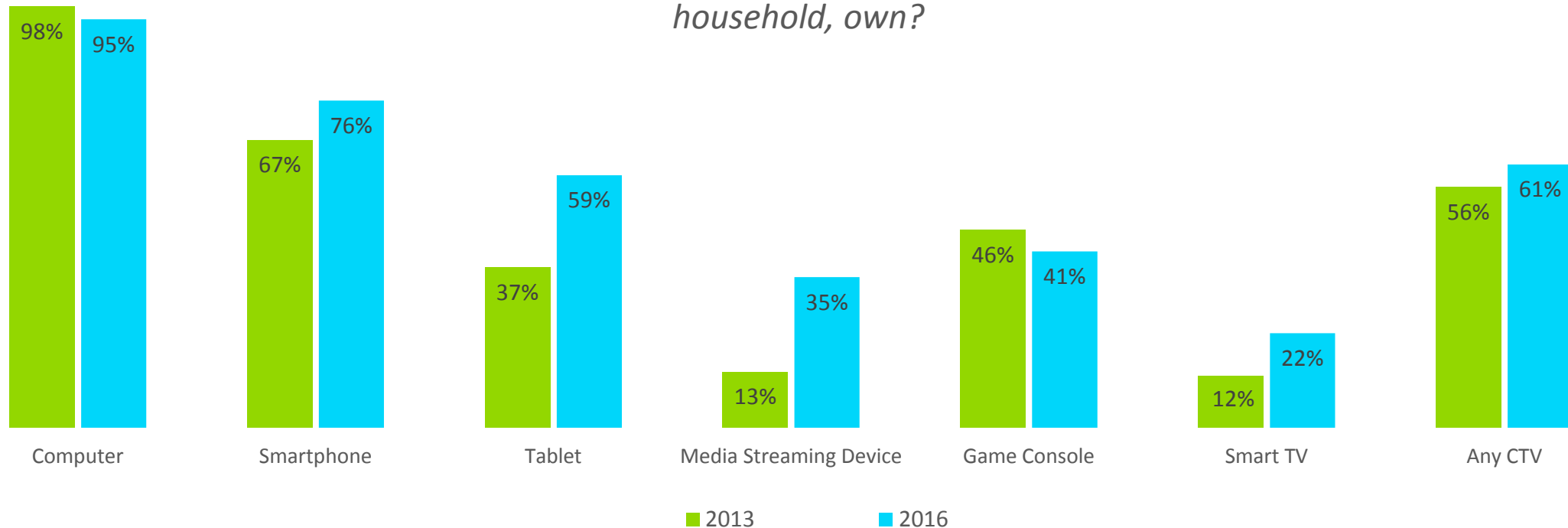
The average daily minutes of tuning to a Connected Device (Computer, Roku, etc.)

* Other content contains any content that is not identifiable. "AOT"= All Other Tuning. This may typically include local station content or any content without or with incorrect encoding to permit identification.

Historical Device Ownership

CTV Ownership Is Increasing

Which of the following Internet-connected devices do you, or someone in your household, own?

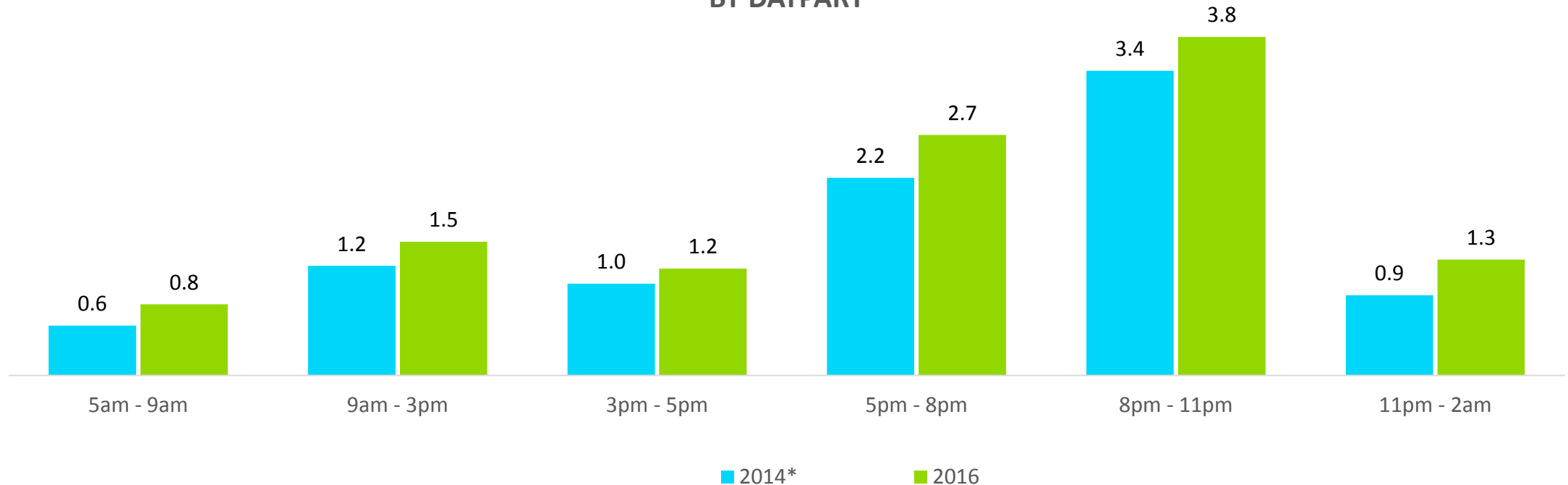


Q1a. Which of the following Internet-connected devices do you, or someone in your household, own?
Base. Total Respondents: 2013 (1014); 2016 (2402)

CTV Usage Since 2014

Average Time Spent Using CTV Devices Has Increased, Especially Morning and Late Night

AVERAGE TIME (HOURS) SPENT ON CTV BY DAYPART



Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

Base: Device Used in Household in Past Week – CTV Device: 2014 (808), 2016 (1017)

* Represents data collected by YuMe/Nielsen in 2014

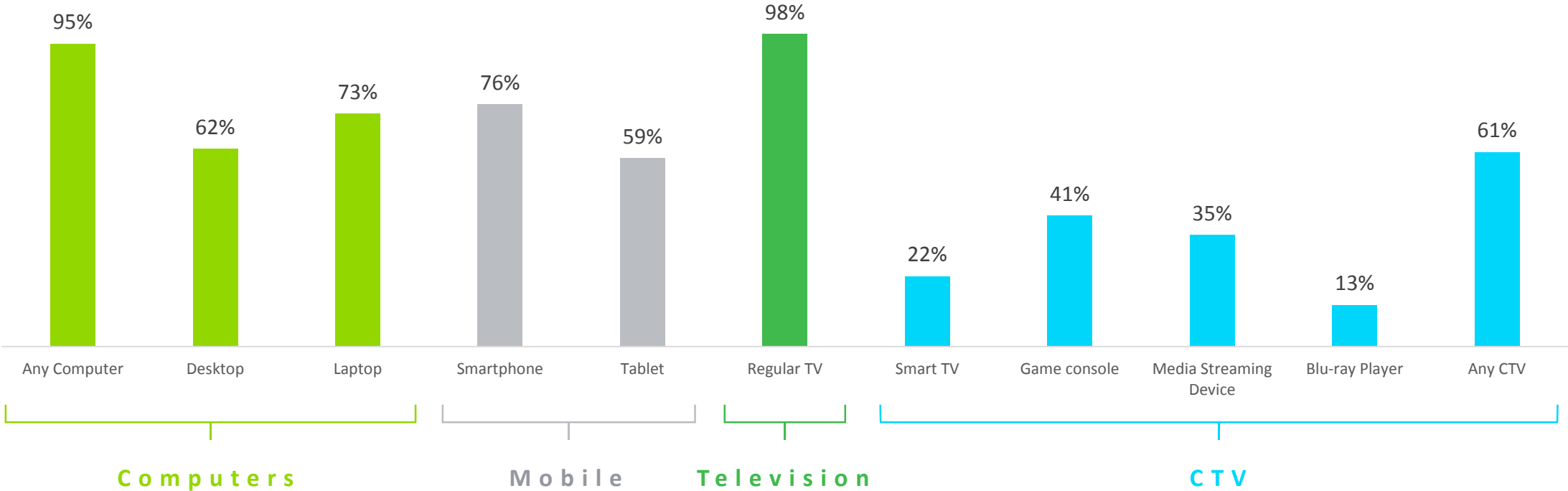
Device Ownership

CTV Becomes Common Device In the Household

Which of the following Internet-connected devices do you, or someone in your household, own?

61%

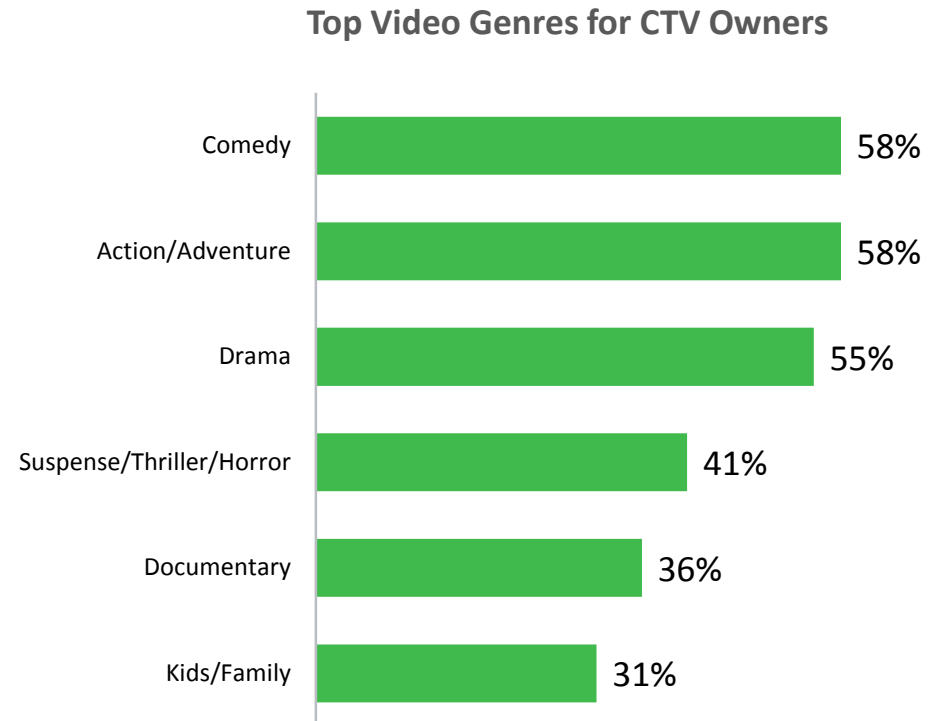
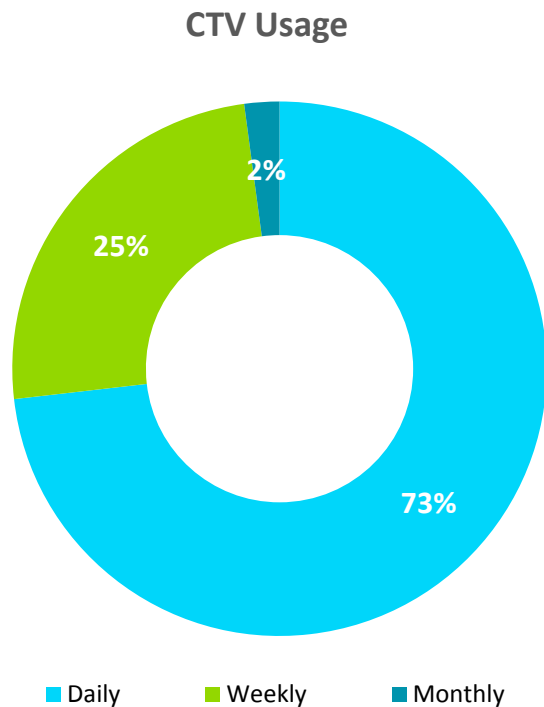
OF HOUSEHOLDS OWN A CTV DEVICE



Q1a. Which of the following Internet-connected devices do you, or someone in your household, own?
Base: Total (2402)

CTV Usage Frequency and Top Genres

7 Out of 10 CTV Owners Use Their Device Daily, Favorite Genres to Watch Are Comedy, Action and Drama.



Q3. How often do you use each of the following devices?

Base: Device Used in Household in Past Week - CTV/OTT Device (838)

Q5c. Which of the following genres or categories of movies or TV shows have you viewed with each device?

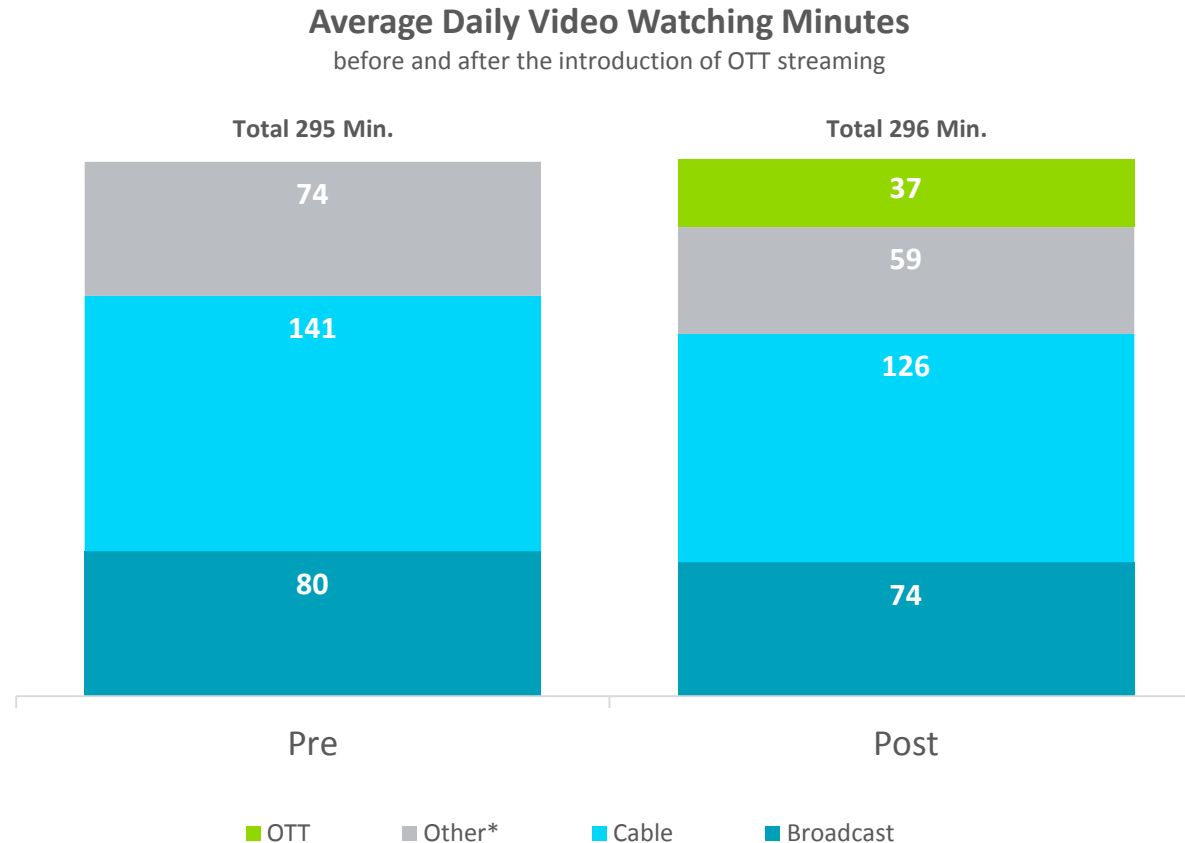
Base: Device Used in Household in Past Week - CTV Device (778)

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BEHAVIORAL OVERVIEW

Introduction of OTT Streaming Into the Household

On Average, 37 Minutes of Daily Viewing Time Is Shifted to OTT



WHILE VIRTUALLY NO
CHANGE IN OVERALL
VIEWING TIME, **37 MINUTES**
PER DAY IS DEDICATED TO
OTT VIEWING

CHANGE IS LARGELY AT THE
EXPENSE OF CABLE AND
OTHER VIEWING

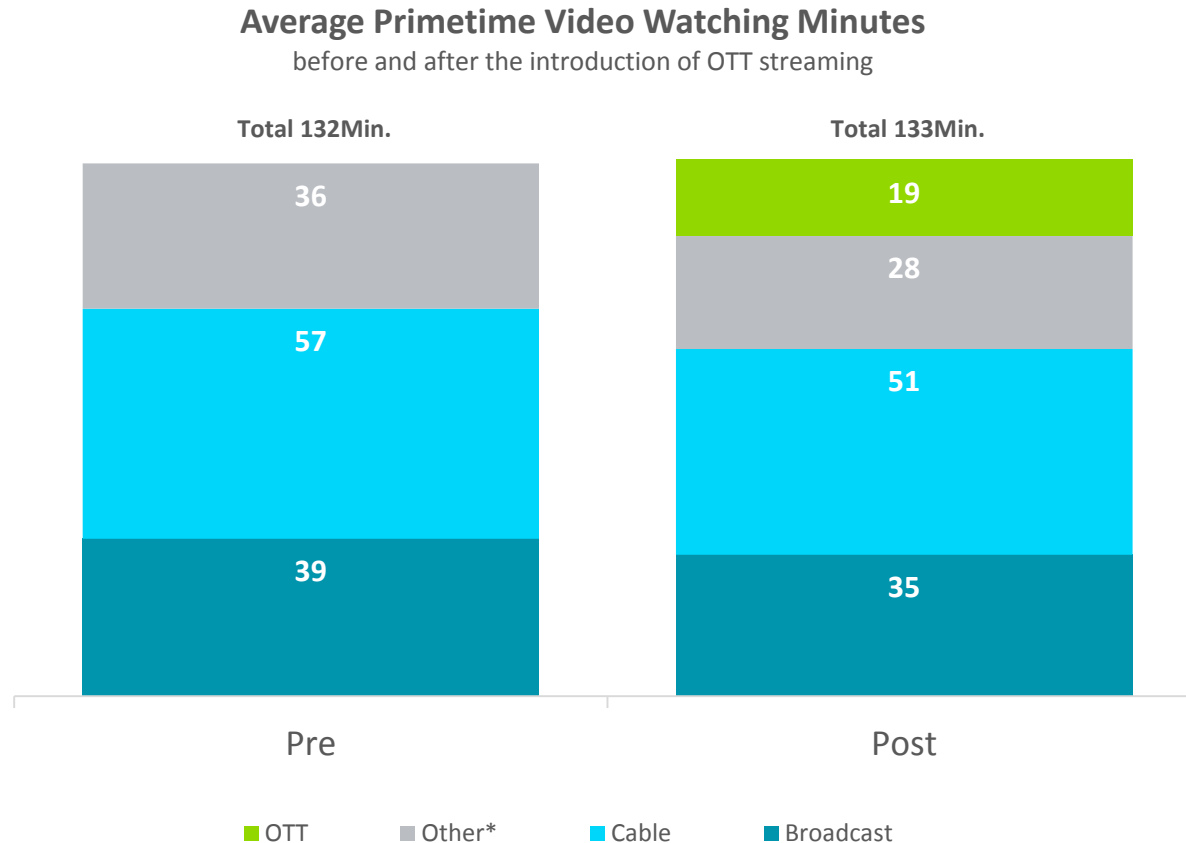
Post Data is defined as: The first broadcast date that a National People Meter Household member was exposed to OTT content between January 1, 2013 and May 31, 2016.

*The average daily minutes the set is tuned to a signal other than those outlined (includes AOT, DVR, DVD, VCR) -- activity originating from a gaming console is excluded.

n=16091

Impact of OTT Viewing on During Primetime

14% of Primetime Viewing Now Includes OTT Streaming (19 Minutes)



WHILE VIRTUALLY NO CHANGE IN OVERALL VIEWING TIME, **19 MINUTES** PER DAY IS DEDICATED TO OTT VIEWING

CHANGE IS LARGELY AT THE EXPENSE OF OTHER VIEWING

Post Data is defined as: The first broadcast date that a National People Meter Household member was exposed to OTT content between January 1, 2013 and May 31, 2016.

*The average daily minutes the set is tuned to a signal other than those outlined (includes AOT, DVR, DVD, VCR) -- activity originating from a gaming console is excluded.

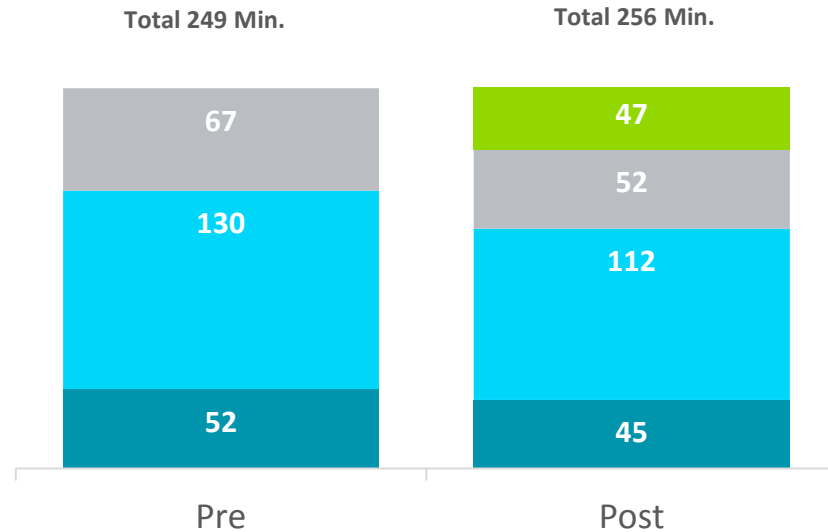
n=16011

OTT Streaming Into the Millennial Household

On Average, 47 Minutes of Daily Viewing Time Is Shifted to OTT

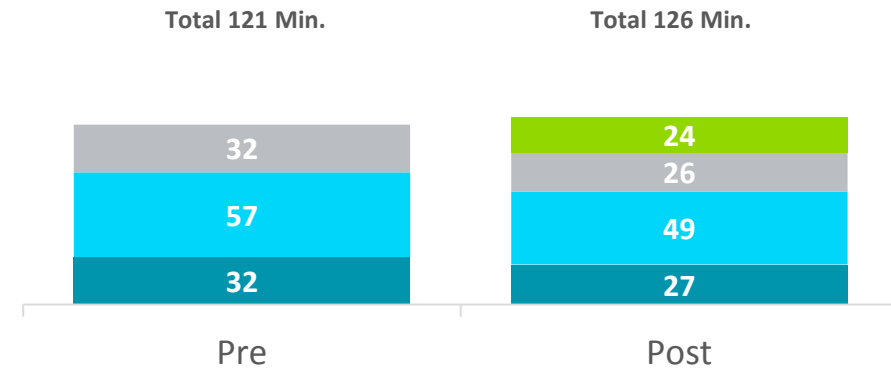
Average Millennial Daily Video Watching Minutes

before and after the introduction of OTT streaming



Average Millennial Primetime Video Watching Minutes

before and after the introduction of OTT streaming



■ OTT ■ Other* ■ Cable ■ Broadcast

Post Data is defined as: The first broadcast date that a National People Meter Household member was exposed to OTT content between January 1, 2013 and May 31, 2016.

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Base: Millennials n=4221, Millennials Primetime n=4178

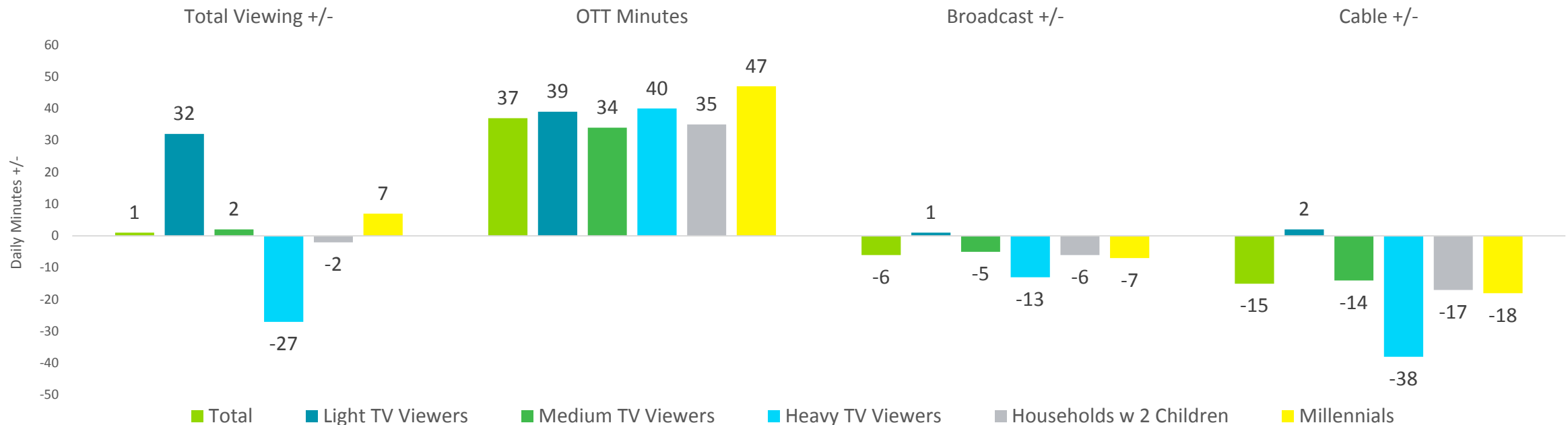
A large, stylized cyan number '4' is positioned on the left side of the slide, partially cut off by the edge. The number is composed of two main vertical strokes with a curved top and bottom, and a horizontal crossbar.

LINEAR TV HOUSEHOLDS

OTT Influence Across TV Households

Light TV Households Total Time Is Extended While Heavy TV Households Total Viewing Decreases

CHANGE IN DAILY VIEWING
AFTER INTRODUCTION OF OTT (min)



Post Data is defined as: The first broadcast date that a National People Meter Household member was exposed to OTT content between January 1, 2013 and May 31, 2016.

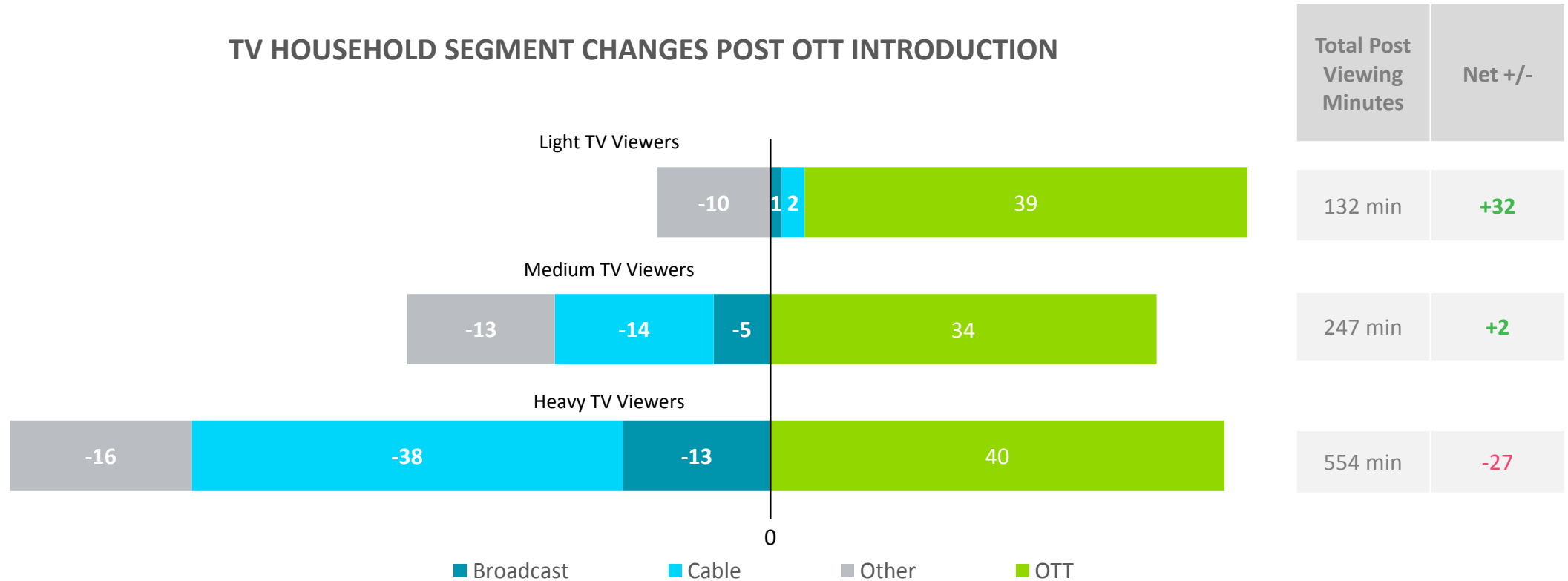
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Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

TV Households by Segment

Light TV Viewers Increase Viewing Time by Largest Margin, While Heavy TV Households Reach a Time Ceiling and Reallocate Their Watching

TV HOUSEHOLD SEGMENT CHANGES POST OTT INTRODUCTION

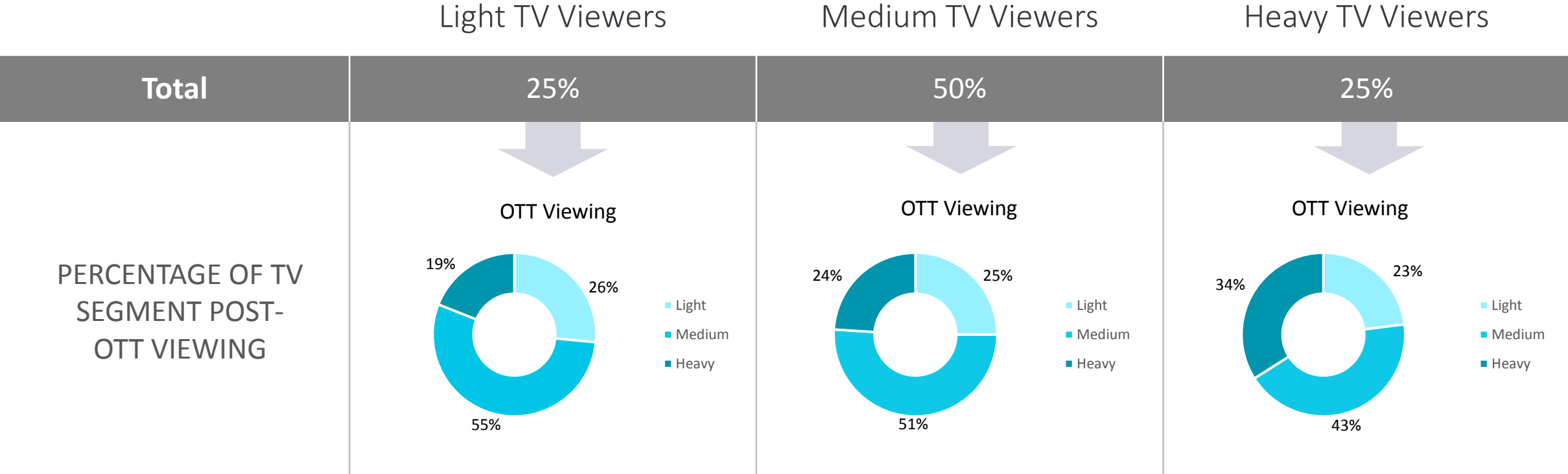


Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

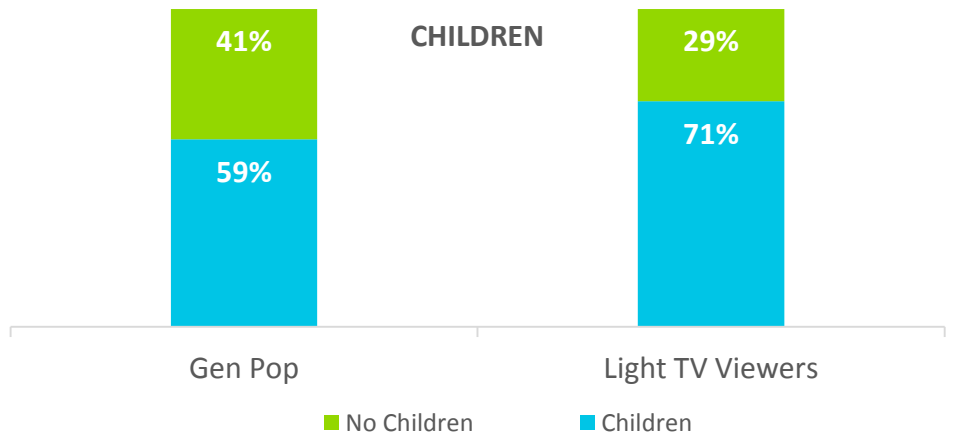
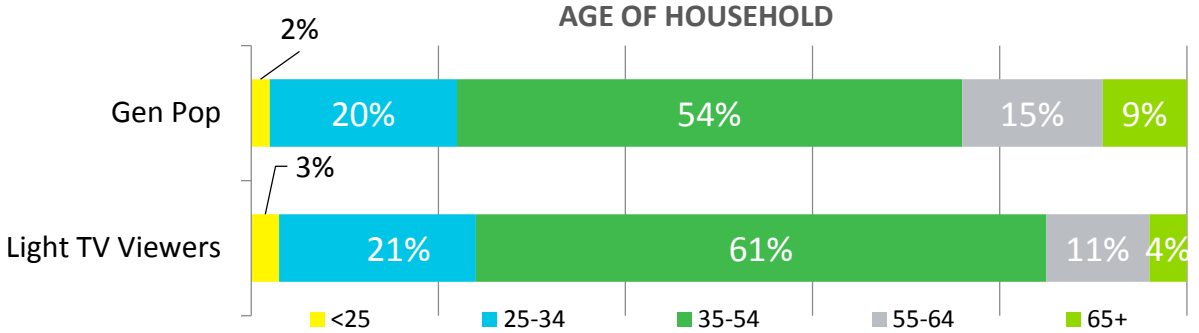
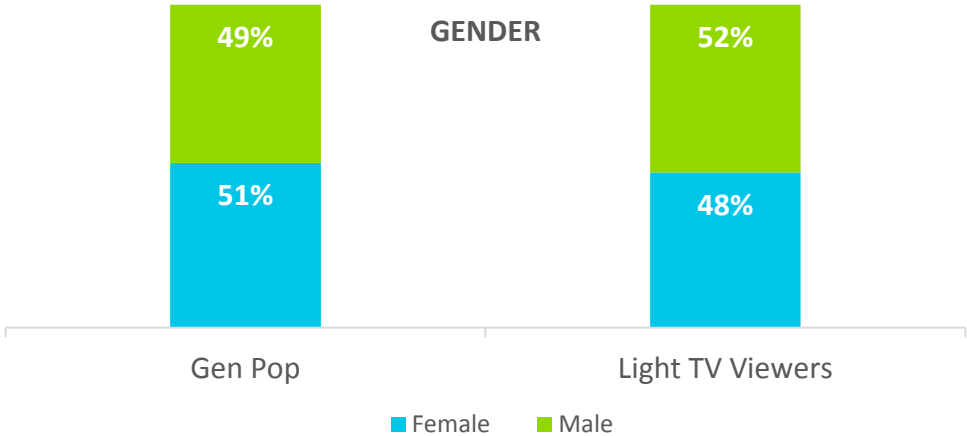
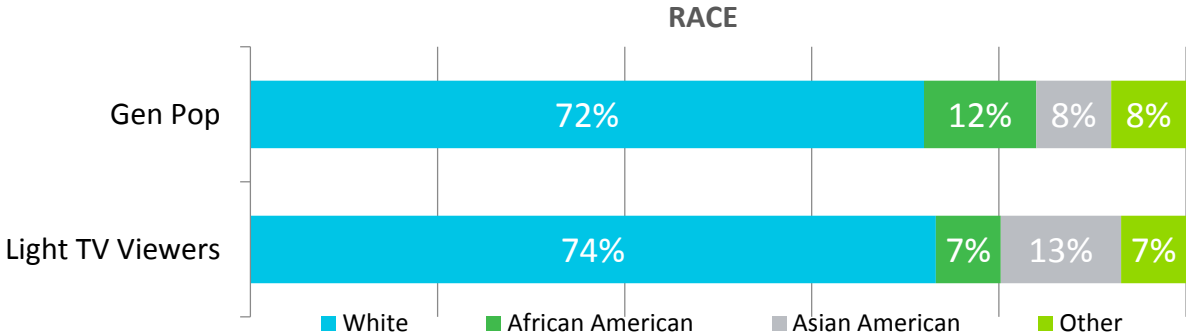
Do Light TV Viewers Become Heavy OTT Viewers?

1-in-5 Light TV Viewers Became Heavy OTT Viewers



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 Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

Light Television Viewing Household Demographics



Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

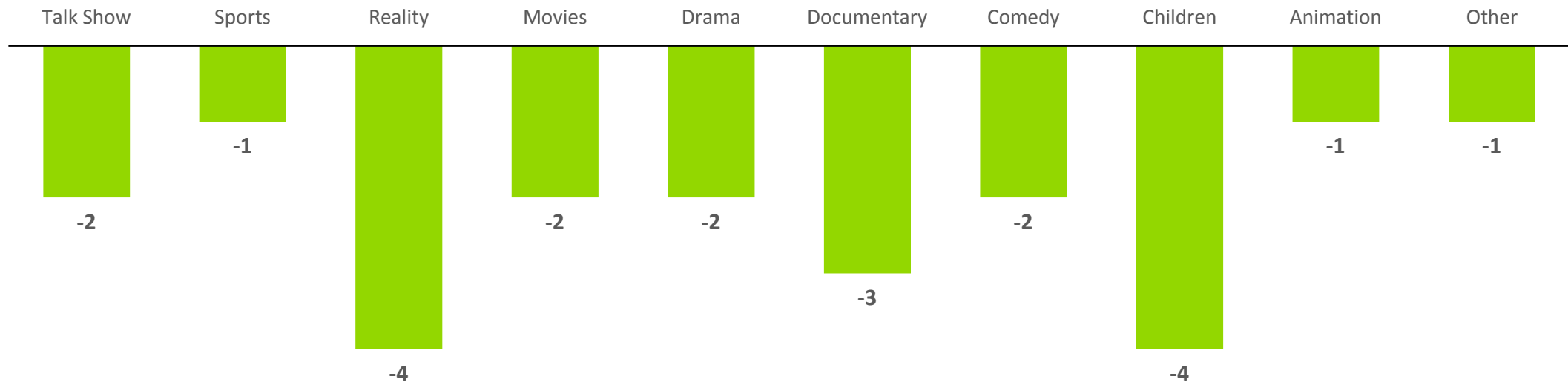
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OTT IMPACT ON CONTENT GENRES

Linear TV Watching Genre Changes POST OTT

Low to Moderate Losses In Linear TV Watching Across Many Genres

LINEAR TV GENRE CHANGES POST OTT
TOTAL SAMPLE
CHANGE IN AVERAGE MINUTES PER DAY



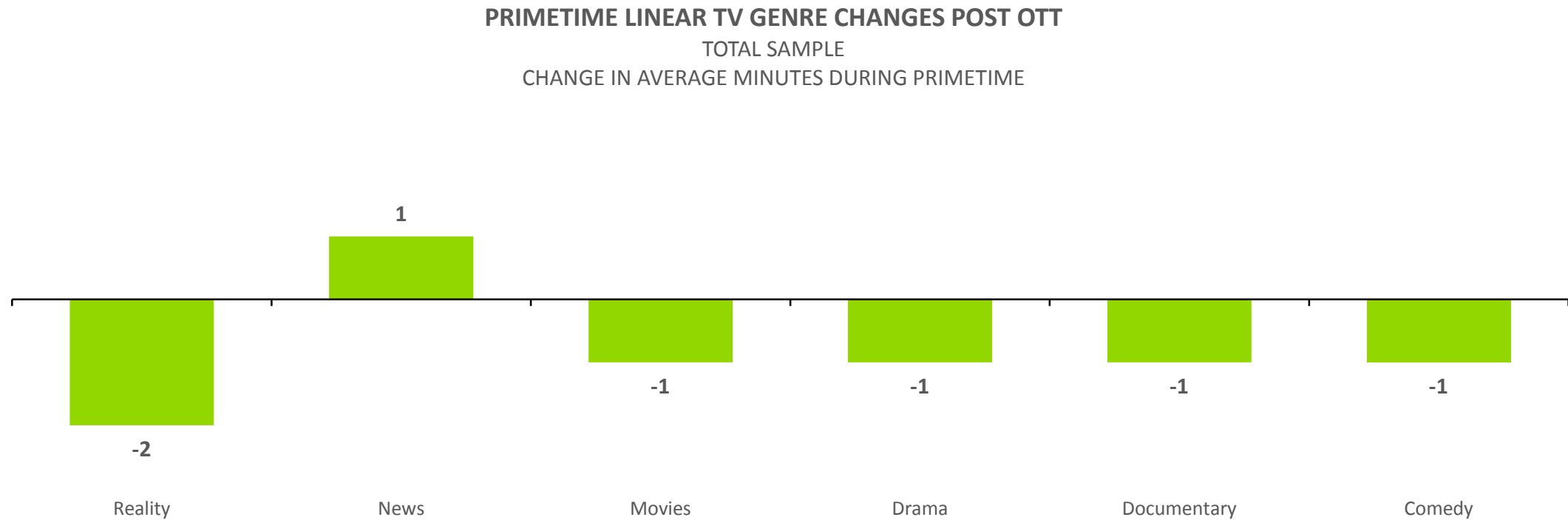
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Base: Total Respondents n=16091

Primetime Linear TV Watching Genre POST OTT

Low Losses in Linear TV Watching Across Few Genres



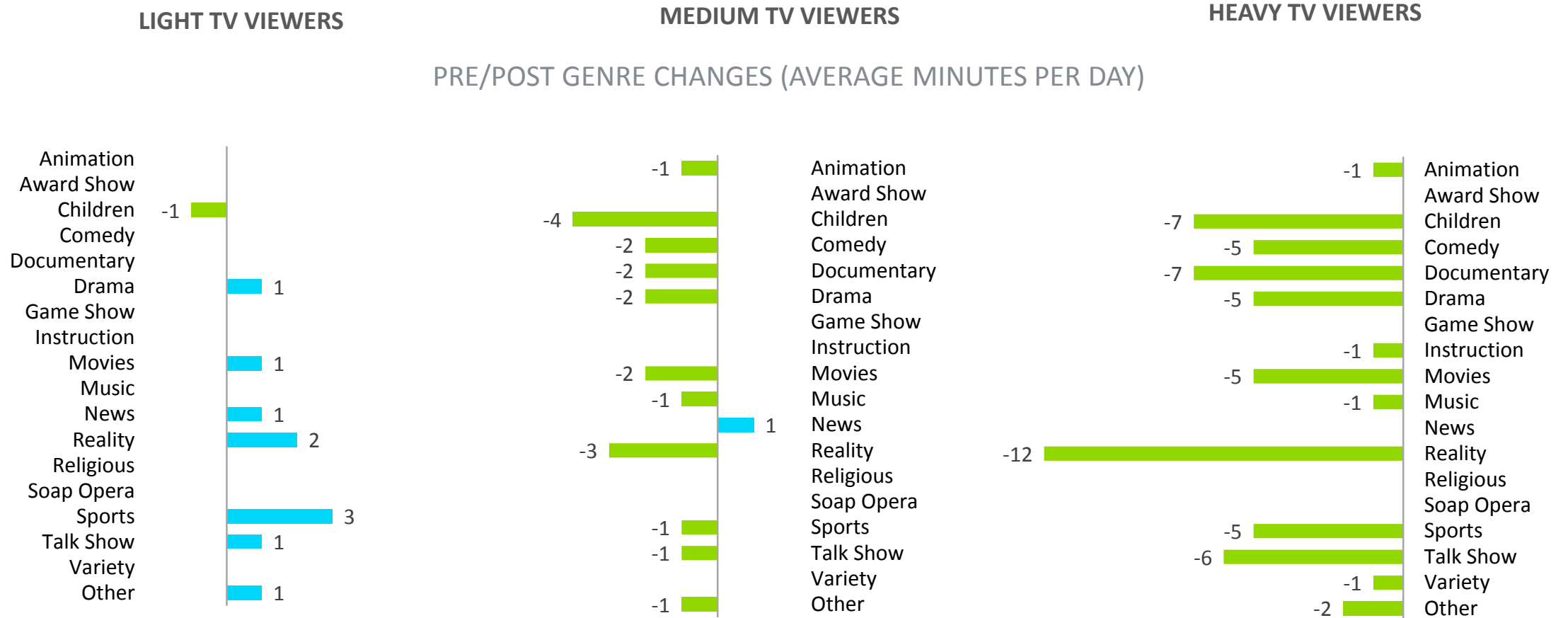
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Base: Total Respondents n=16011

LINEAR TV Watching Genre Changes Post OTT

While Light Viewers See Some Increases, Heavy TV Viewers Have Largest Decline In Reality TV

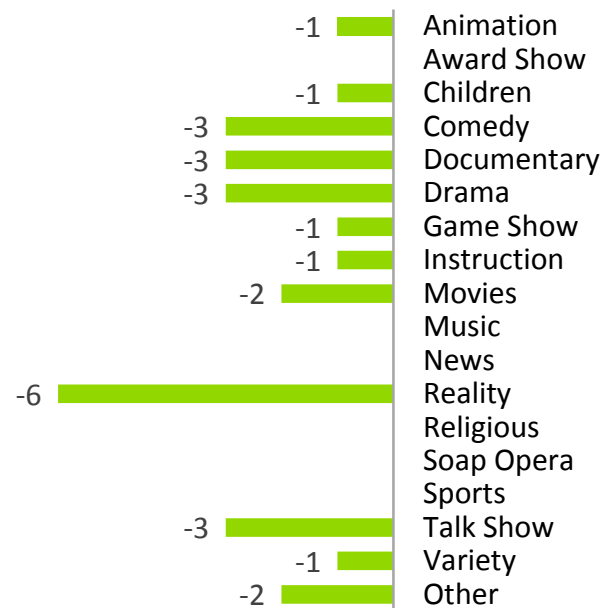


Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

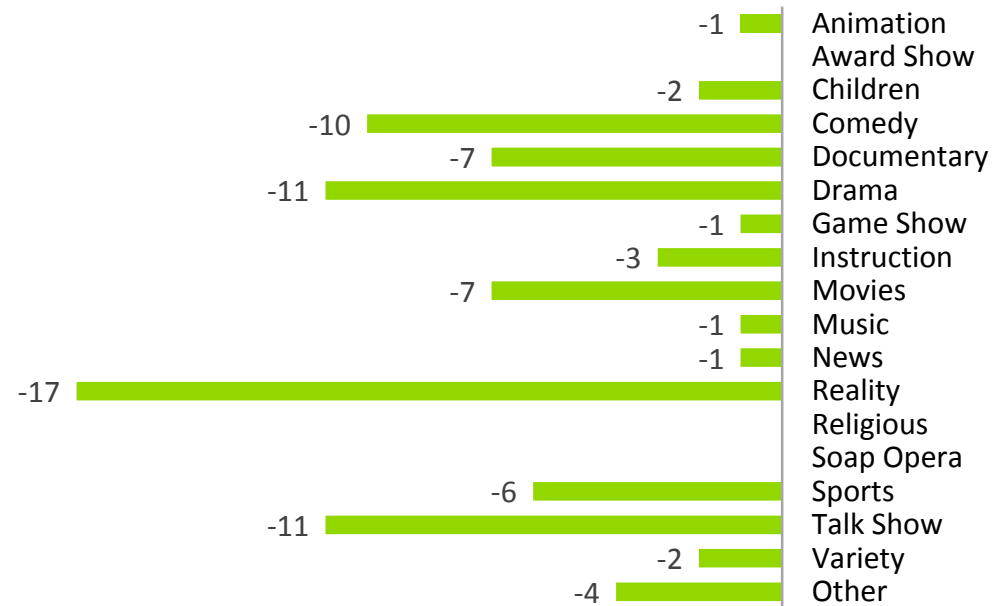
TV Watching Genre Changes for Millennials

Reality Television Takes Largest Cut with Millennials

MILLENNIALS
PRE/POST GENRE CHANGES
AVERAGE MINUTES PER DAY



MILLENNIAL HEAVY TV VIEWERS
PRE/POST GENRE CHANGES
AVERAGE MINUTES PER DAY



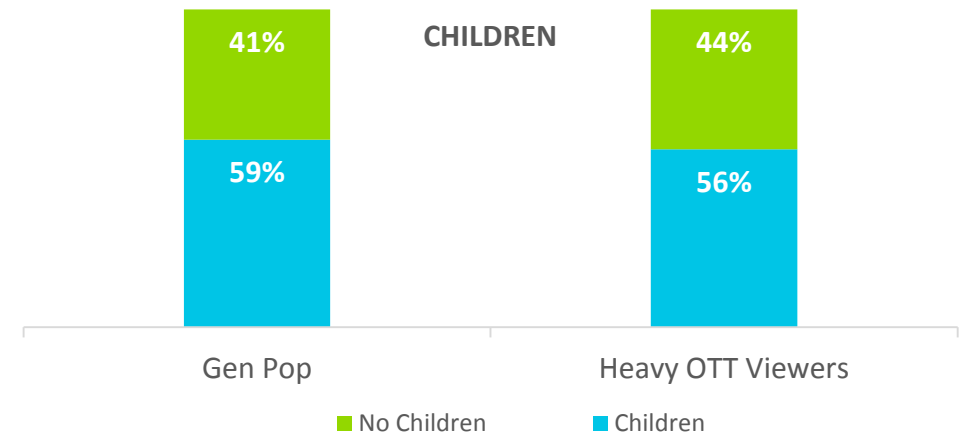
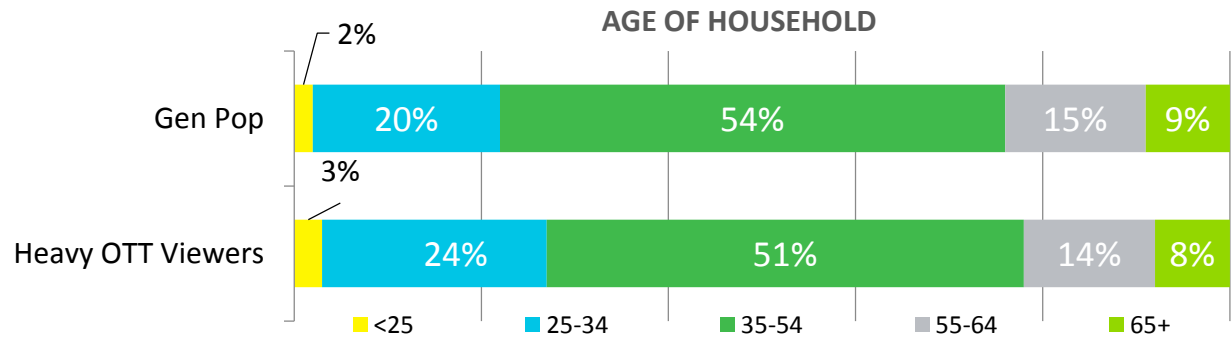
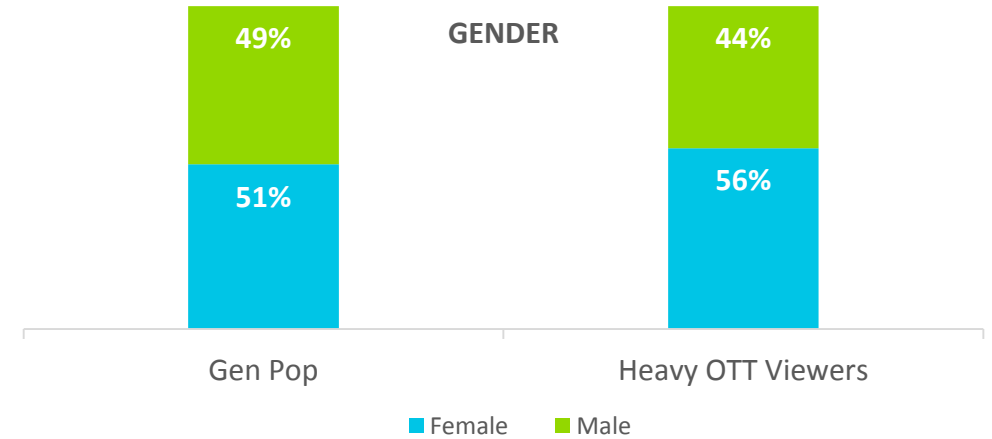
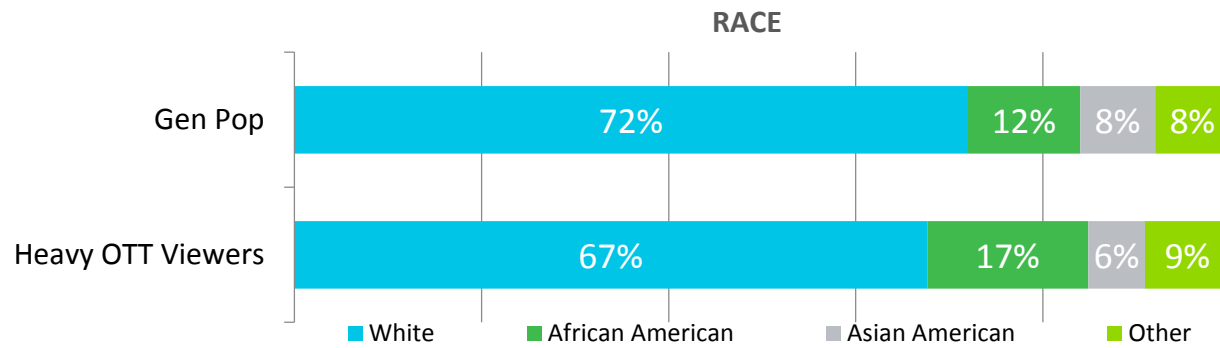
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A large, stylized number '4' in a bright cyan color, positioned on the left side of the slide. The number is composed of two main vertical strokes with a horizontal bar connecting them in the middle.

HEAVY OTT VIEWERS

Heavy OTT Viewing Household Demographic

Heavy OTT Viewers More Diverse and More Likely to be Female

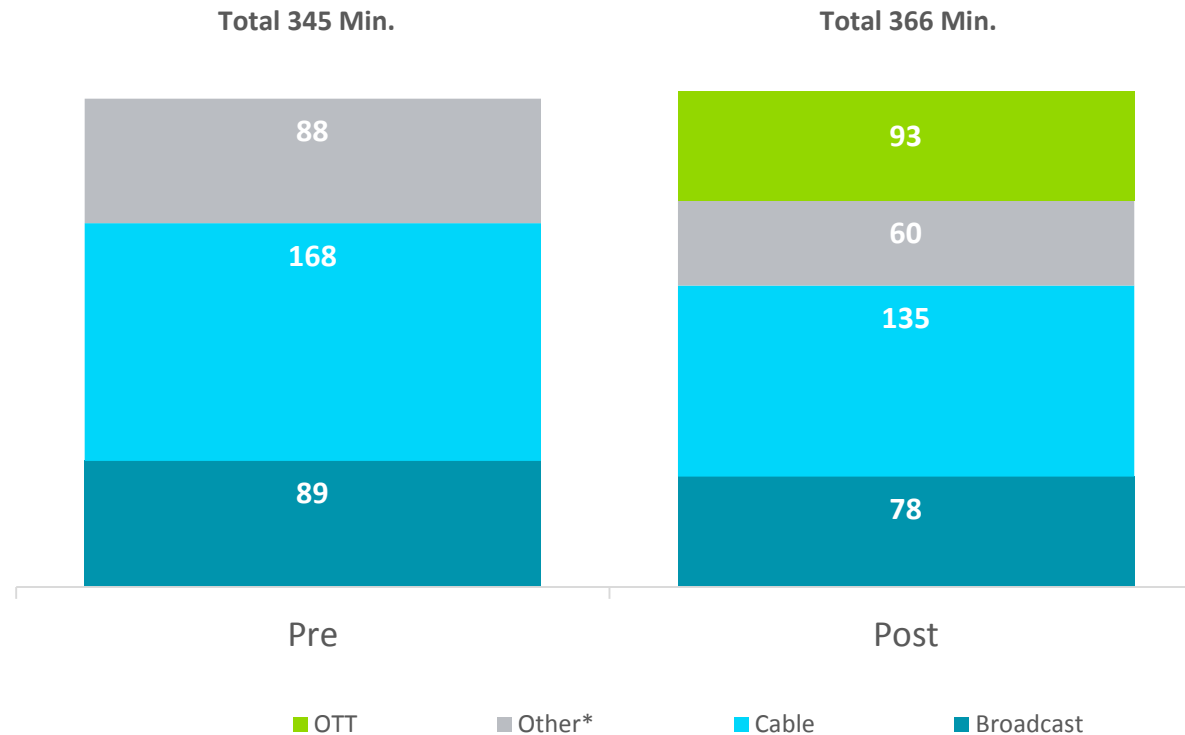


Note: OTT quartiles were defined using a segmentation of the top 25% (Heavy n=4066), middle 50% (Medium n=8018) and bottom 25% (Light n=4007) average daily minutes.

Heavy OTT Viewing Households

Heavy OTT Viewers Watch 93 Minutes of OTT Content Daily

Average Daily Video Watching Minutes for Heavy OTT Viewers
before and after the introduction of OTT streaming



WITH THE INTRODUCTION OF OTT
THOSE WHO BECOME HEAVY OTT
VIEWERS INCREASED THEIR TOTAL
VIEWING TIME BY **21 MINUTES**
AND **CABLE TV WATCHING**
DECREASES THE MOST
OF ALL VIEWING TYPES

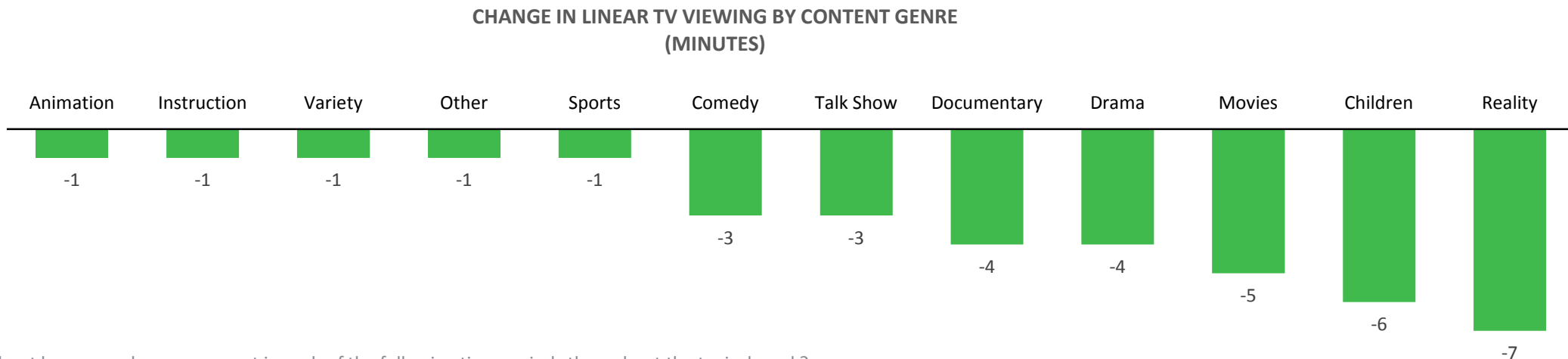
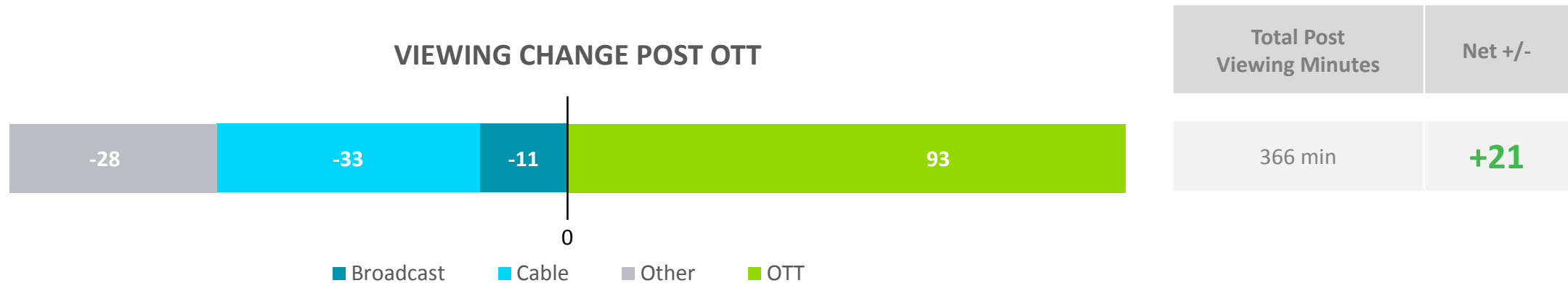
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n=4066

Heavy OTT Viewing Households Spend 27% of Time on Ott

Cable has Largest Decrease with -33 Total Minutes



Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

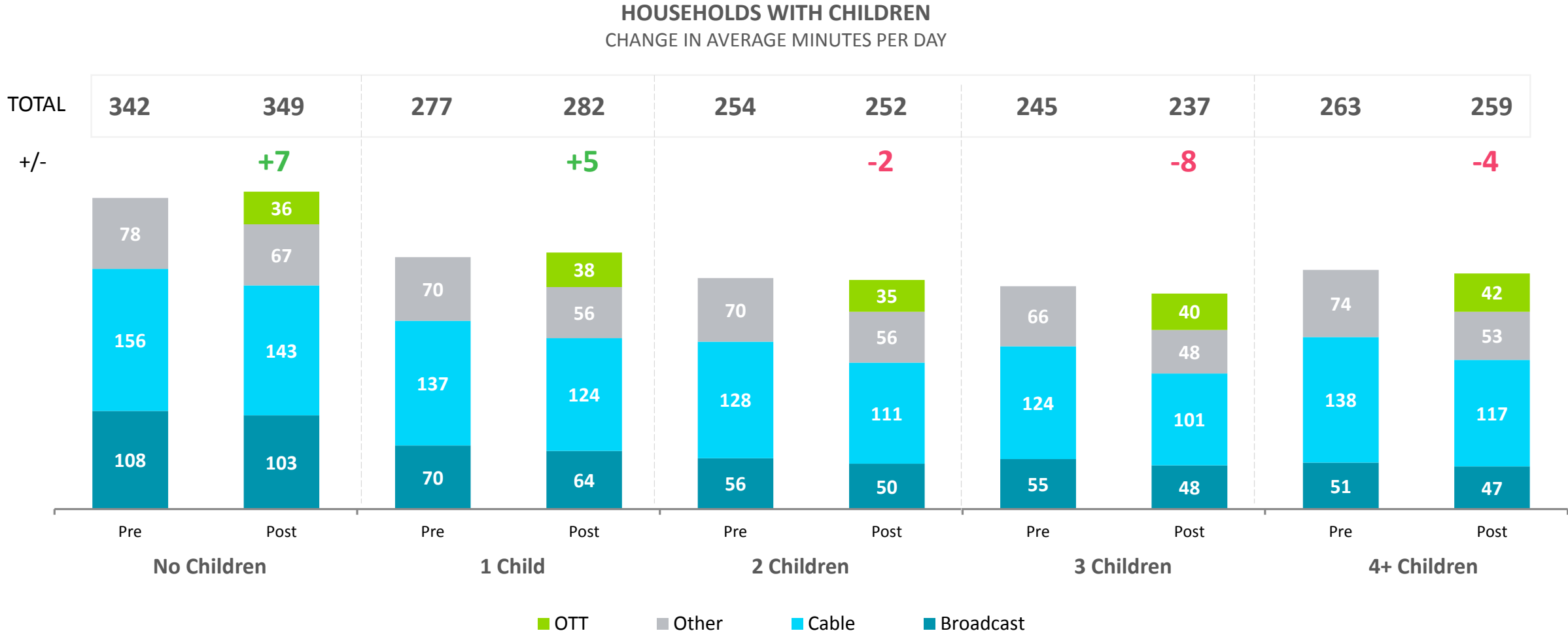
Note: OTT quartiles were defined using a segmentation of the top 25% (Heavy n=4066), middle 50% (Medium n=8108) and bottom 25% (Light n=4007) average daily minutes.



ADDITIONAL DEMOS

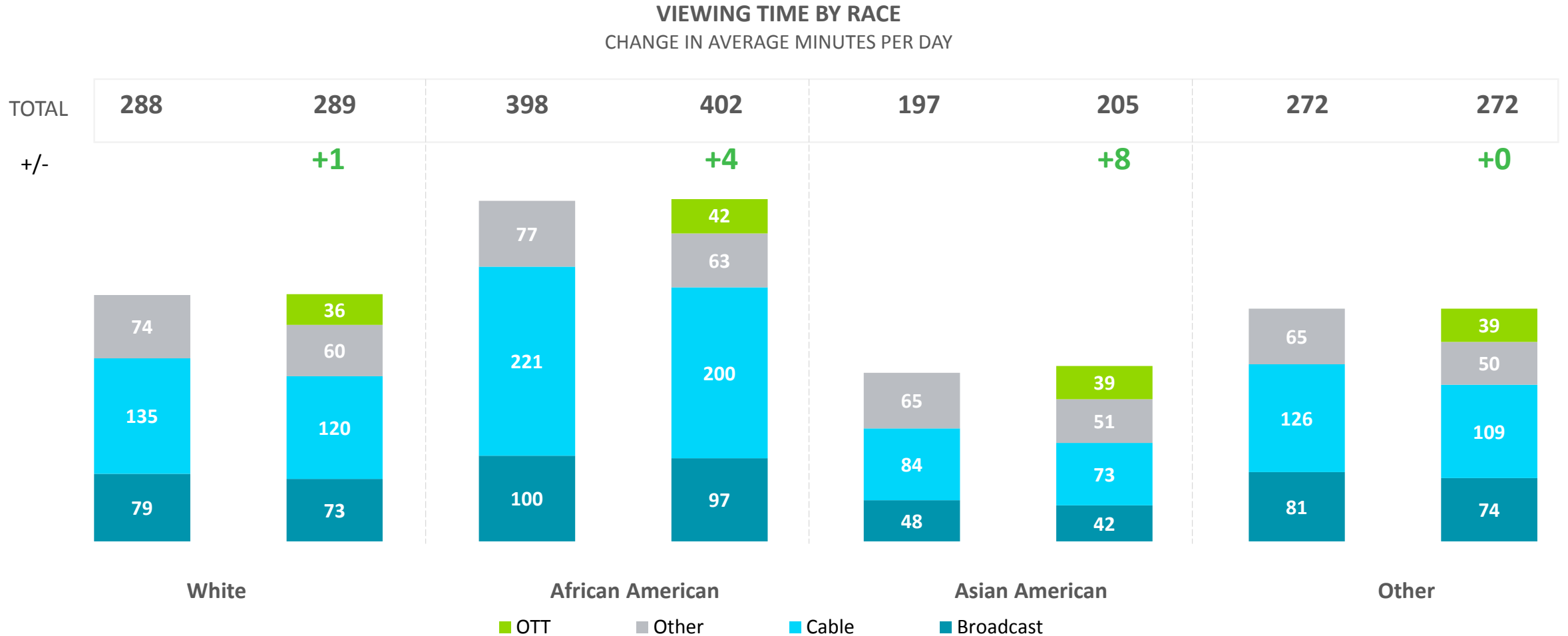
More Kids in Household Leads to More OTT Time

Households with 4 Kids Watch 42 Minutes of OTT Daily



TV Viewing Time by Race

Viewing Time and Composition Differs by Race



Key Takeaways

Putting it All Together

- The introduction of a CTV device does not significantly affect average television viewing time.
- Adding an OTT device causes “Other” offline viewing minutes to lose largest share of viewing time in move to online streamed content.
- Light TV viewing households **increase daily average viewing time by 32%** after adding an OTT device.
- While heavy OTT households add only **6% more average daily viewing time** after adding a OTT device, it accounts for **25% of their total viewing time**.
- Households with children spend more time watching on OTT devices than childless households. In addition, the more children, the more time spent on OTT.



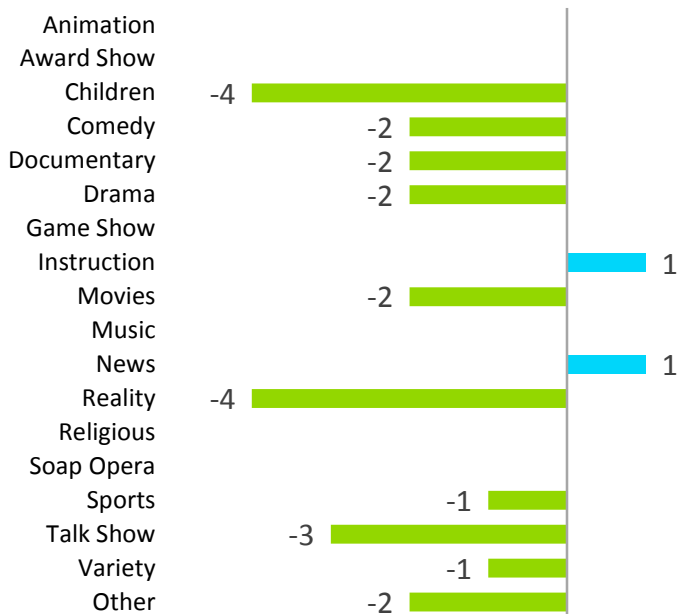
APPENDIX

Does the Number of Kids Have an Affect Across Genres?

Decline in Children's Content on Linear TV is More Dramatic with More Children in Household

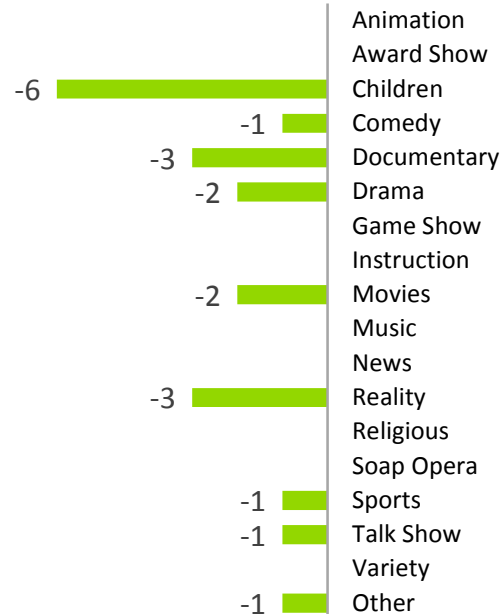
HOUSEHOLDS WITH 1 CHILD

PRE/POST GENRE CHANGES
AVERAGE MINUTES PER DAY



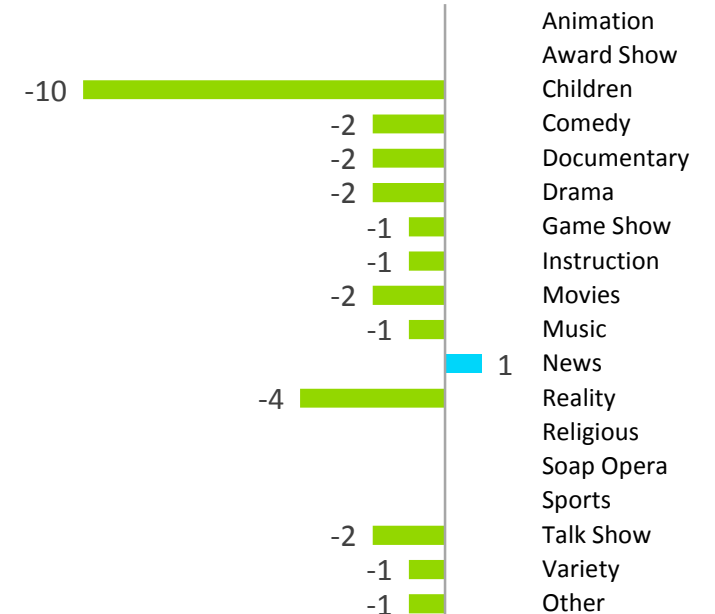
HOUSEHOLDS WITH 2 CHILDREN

AVERAGE MINUTES PER DAY

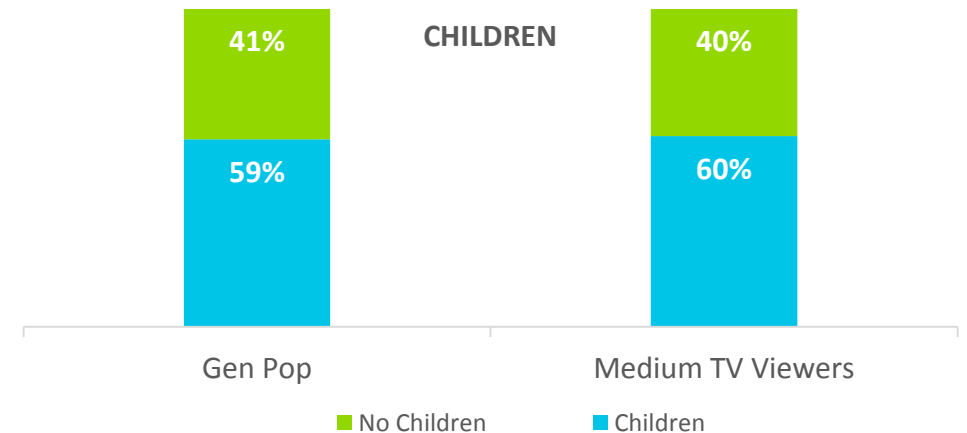
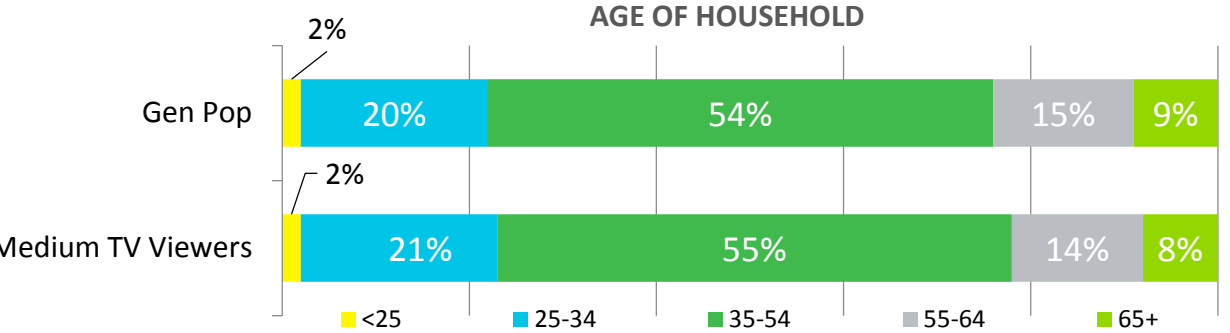
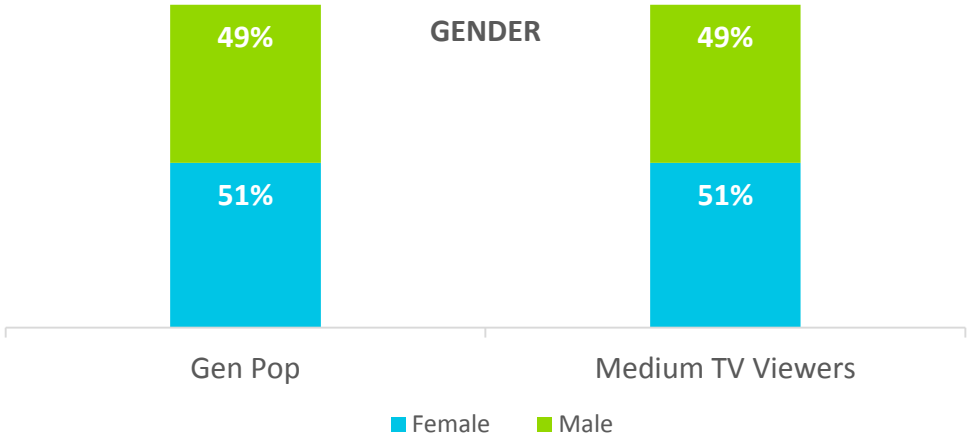
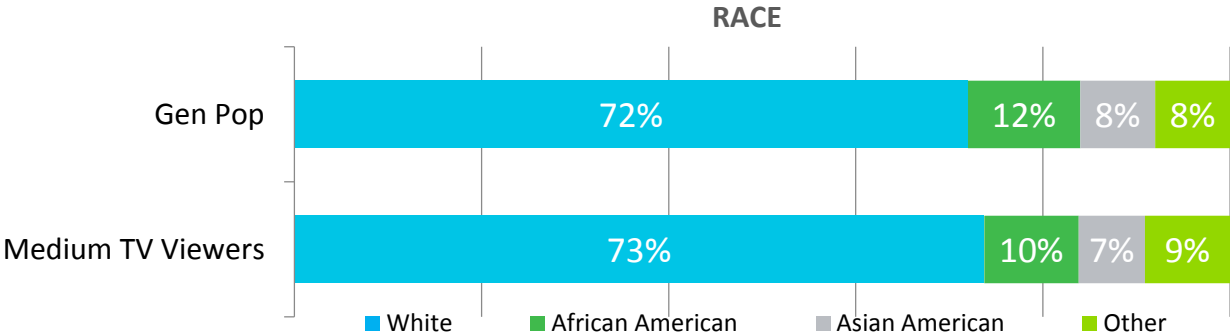


HOUSEHOLDS WITH 3 CHILDREN

AVERAGE MINUTES PER DAY

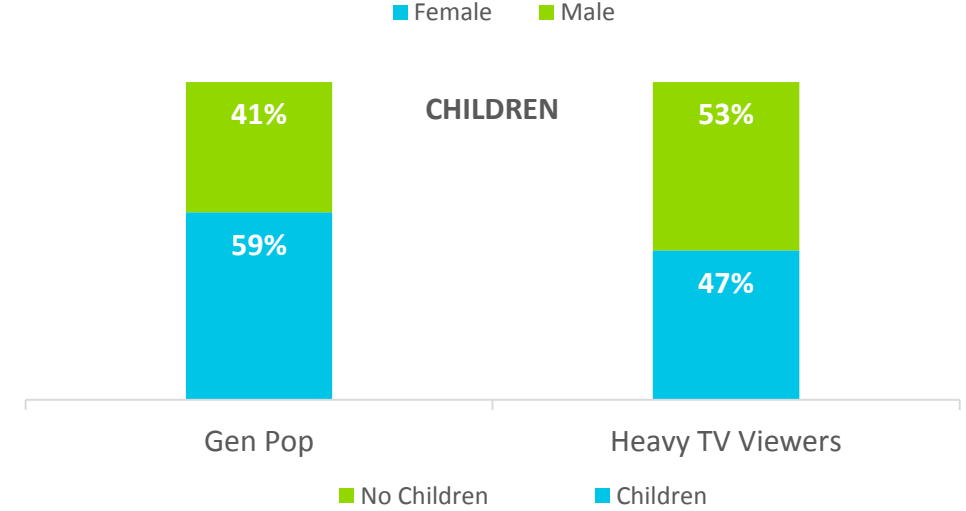
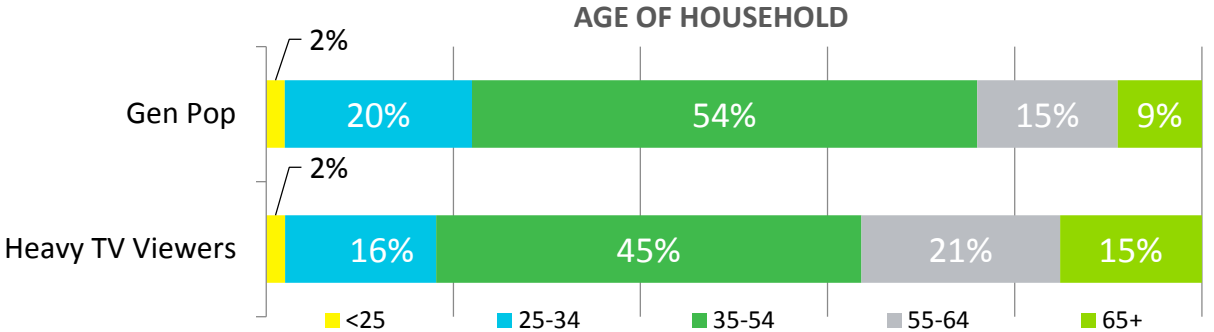
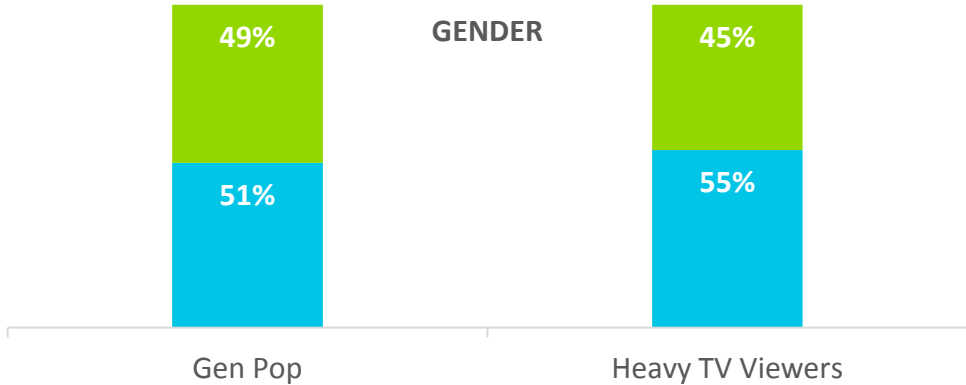
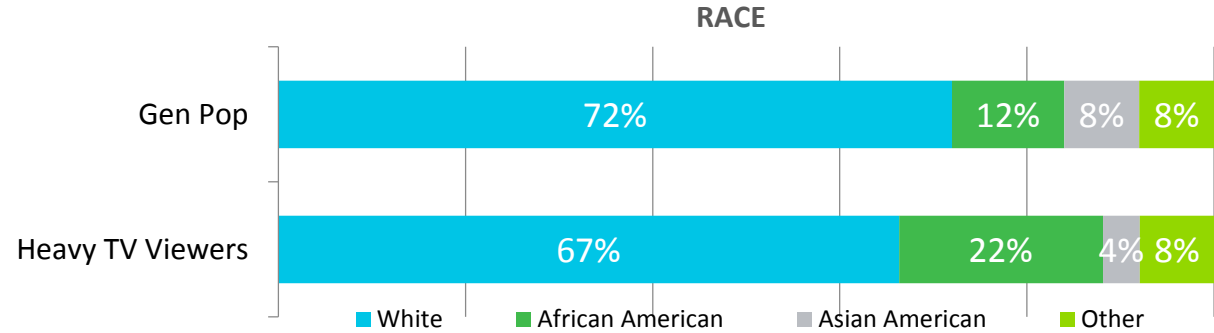


Medium Television Viewing Household Demographics



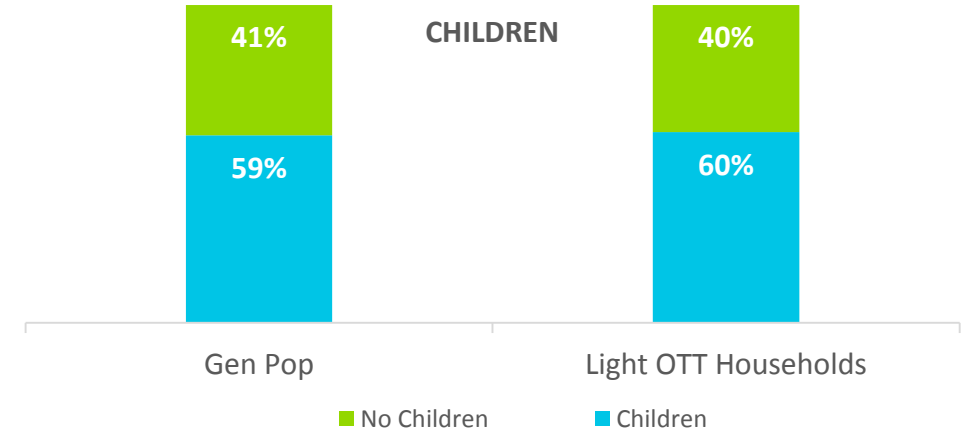
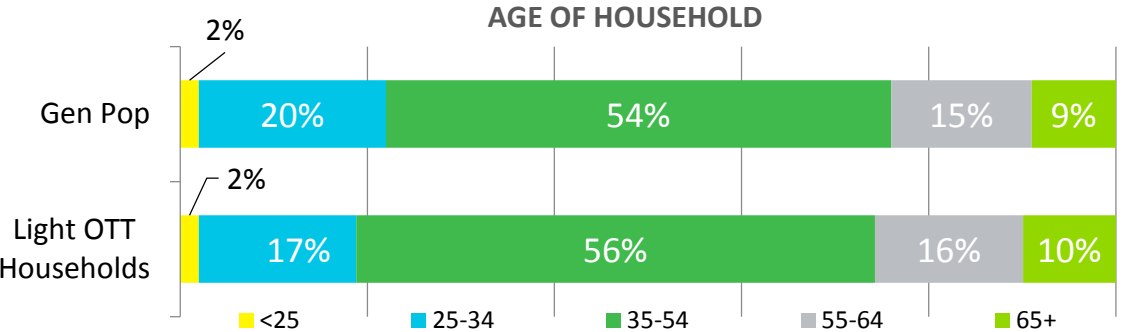
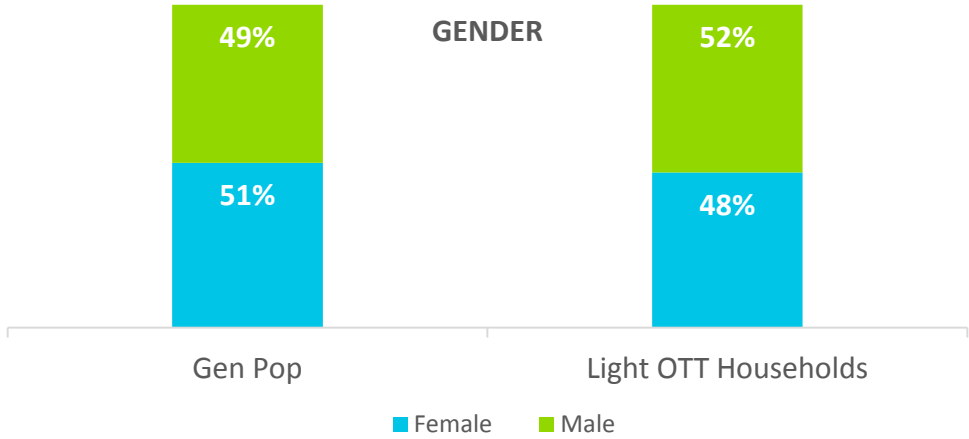
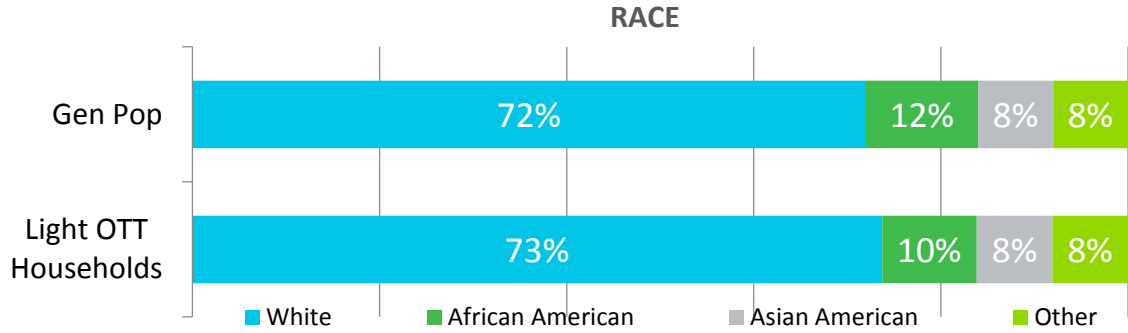
Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

Heavy Television Viewing Household Demographics



Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=4033), middle 50% (Medium n=8091) and bottom 25% (Light n=3967) average daily minutes.

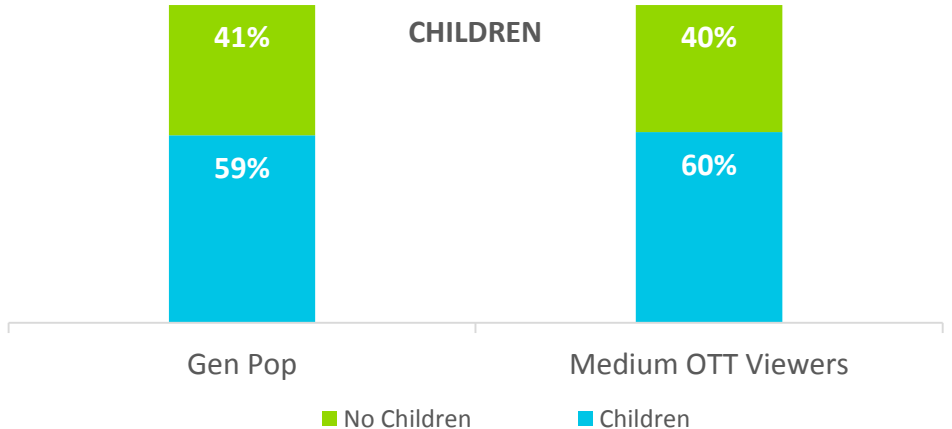
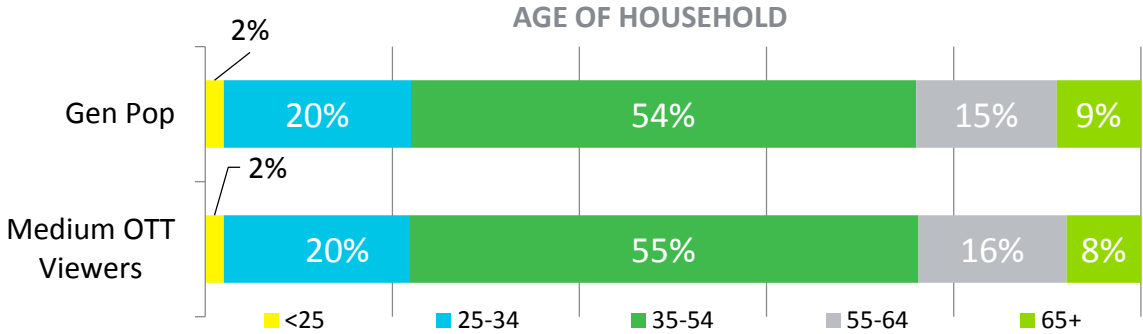
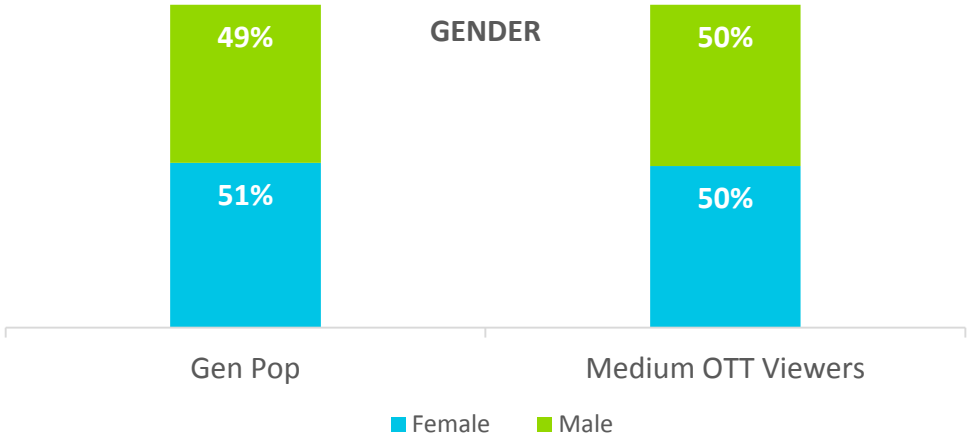
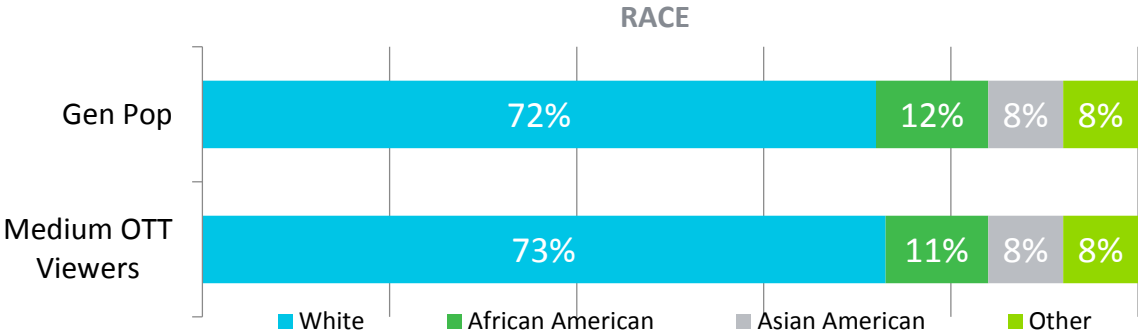
Light OTT Viewing Household Demographic



Note: OTT quartiles were defined using a segmentation of the top 25% (Heavy n=4066), middle 50% (Medium n=8108) and bottom 25% (Light n=4007) average daily minutes.

Medium OTT Viewing Household Demographic

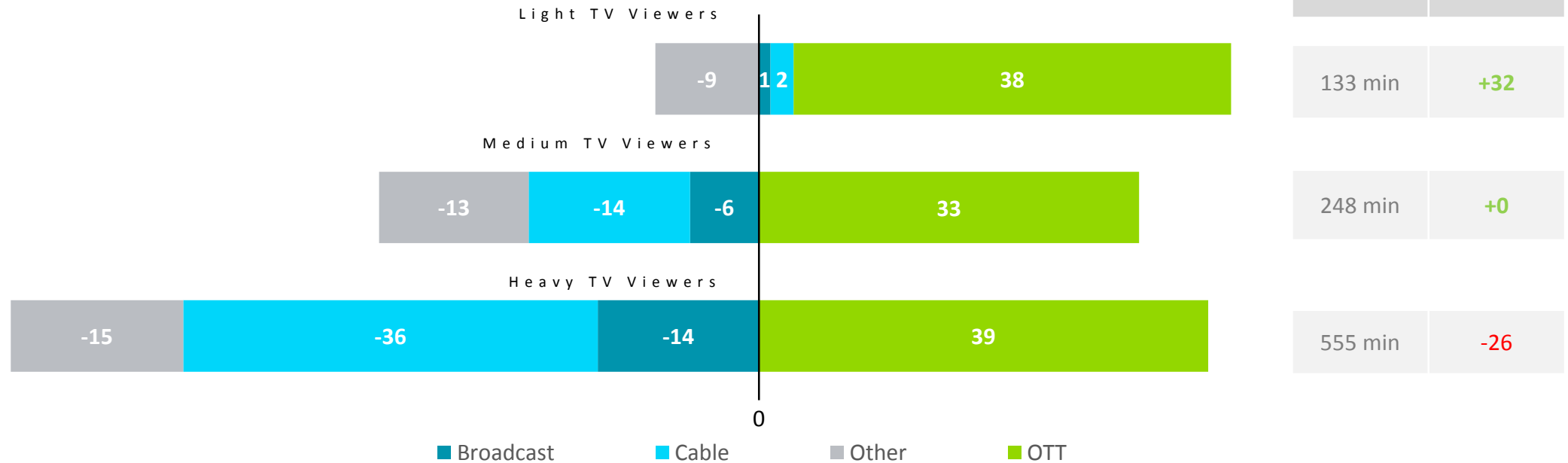
Medium OTT Viewers are Similar to Gen Pop



Note: OTT quartiles were defined using a segmentation of the top 25% (Heavy n=4066), middle 50% (Medium n=8108) and bottom 25% (Light n=4007) average daily minutes.

White TV Viewers by Segment

TV USER SEGMENT CHANGES POST OTT INTRODUCTION

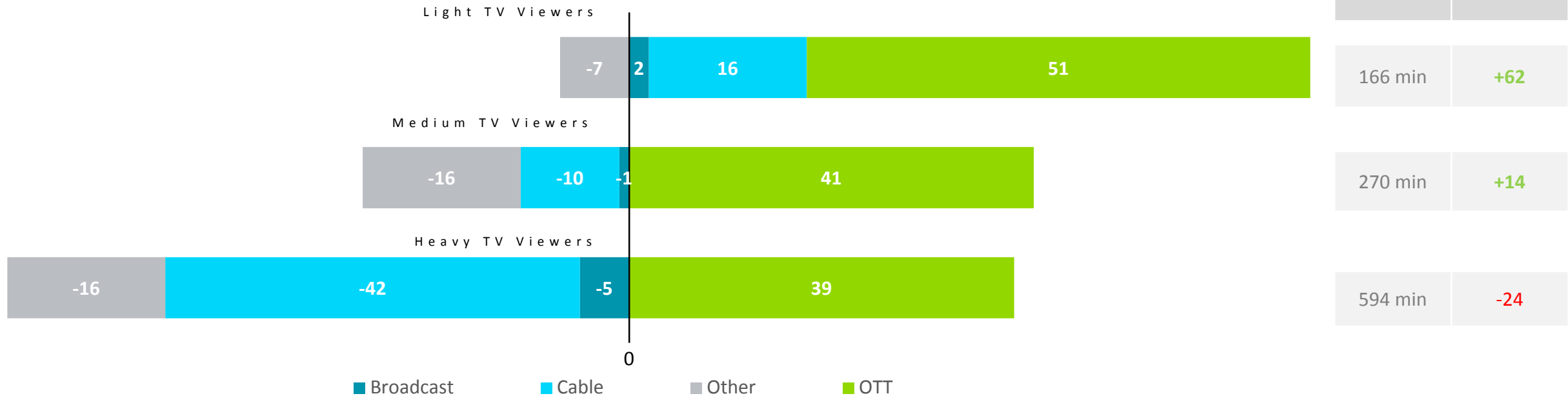


Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=2696), middle 50% (Medium n=5919) and bottom 25% (Light n=2940) average daily minutes. n=11555

African American TV Viewers by Segment

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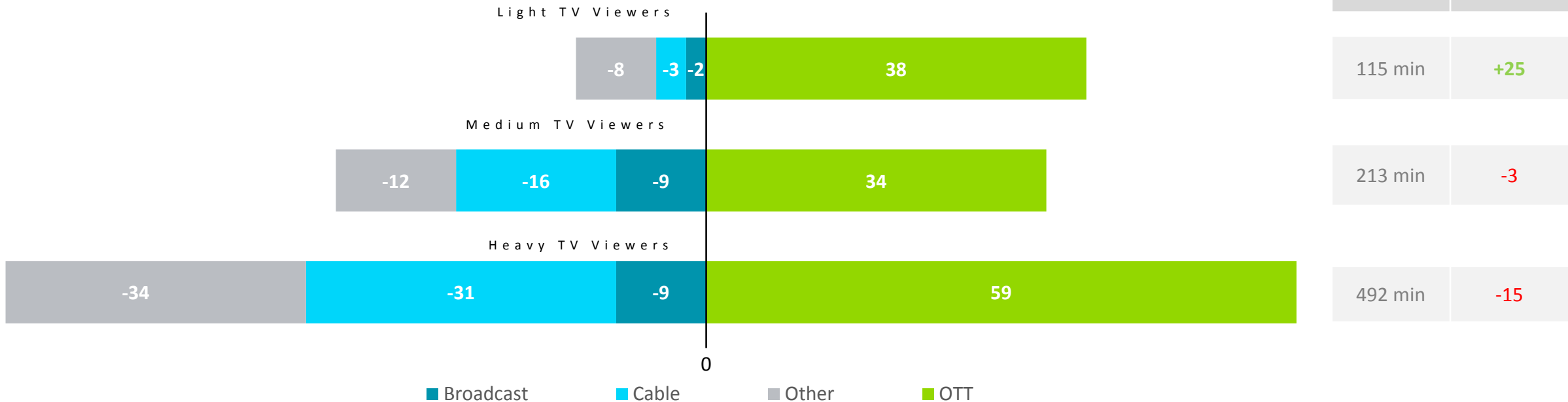
Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=891), middle 50% (Medium n=838) and bottom 25% (Light n=260) average daily minutes.

n=1989

Asian American TV Viewers by Segment

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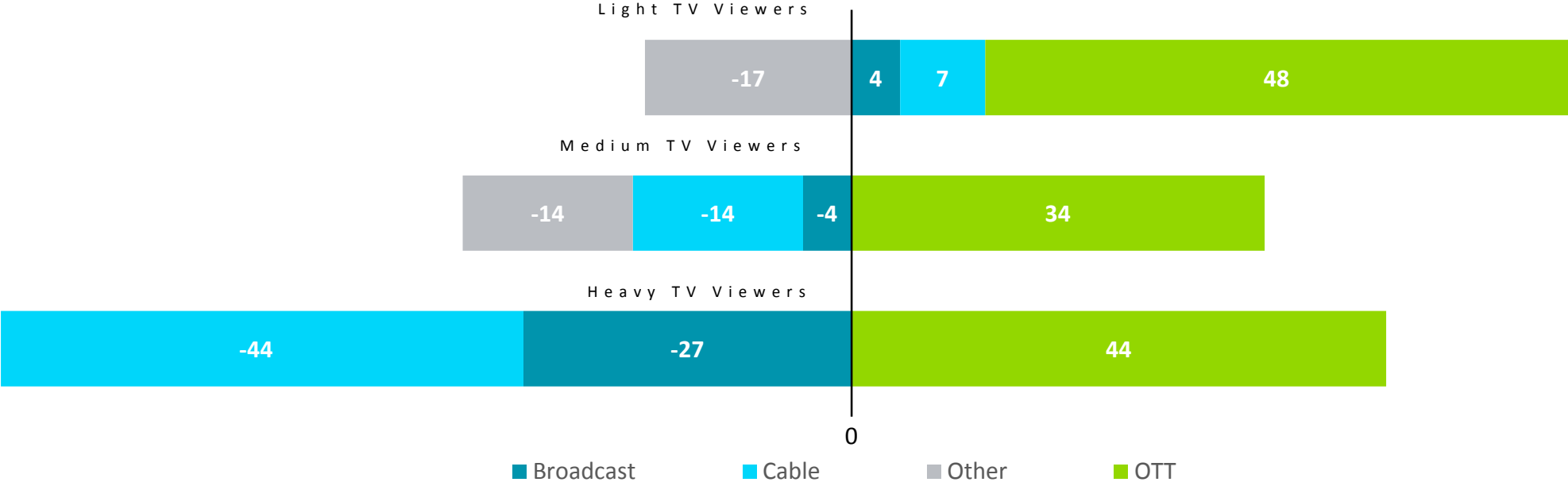
Q5e. About how many hours are spent in each of the following time periods throughout the typical week?

Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=142), middle 50% (Medium n=565) and bottom 25% (Light n=506) average daily minutes.

n=1213

“Other” American TV Viewers by Segment

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Total Post Viewing Minutes	Net +/-
140 min	+42
238 min	+2
468 min	-45

Q5e. About how many hours are spent in each of the following time periods throughout the typical week?
 Note: TV quartiles were defined using a segmentation of the top 25% (Heavy n=303), middle 50% (Medium n=767) and bottom 25% (Light n=258) average daily minutes.
 n=1328