SENIORS ON THE SMALL SCREEN:
AGING IN POPULAR TELEVISION CONTENT

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KEY FINDINGS

The goal of the present investigation is to assess the prevalence and portrayal of senior characters in popular television programming. The study is comprised of two samples of popular television series airing between June 1, 2016 and May 31, 2017. Popularity was determined based on Nielsen Average Audience Rating Percentage. The first sample includes the 50 most popular television series among viewers age 18-49. The second sample includes the 50 most popular television series among viewers age 65 and older. It is important to note that 28 series are popular with both sets of viewers and appear in analyses for both samples. We discuss overall trends for the 72 unique series across both samples.   Due to the overlap between samples and the small number of characters included in some analyses, however, caution should be exercised when interpreting differences between the 18-49 and 65-plus samples.

Both quantitative and qualitative methods were used in the study to evaluate the portrayal of senior characters. For quantitative measures, one episode of each series was analyzed and every speaking or named character on screen was evaluated. Following this, a series of measures assessed the depiction of characters age 60 and older across these stories. Finally, a qualitative analysis of main (i.e., leading, supporting, and series regular) senior characters was performed.

#1 What is the Demographic Profile of Seniors on Popular TV?

Senior characters represent less than 10% of all speaking characters across the 72 unique shows. Out of 1,609 speaking characters evaluated, a total of 9.4% (n=151) were age 60 and above in the 72 unique TV series analyzed. This point statistic is below (-10.5%) U.S. Census (19.9%).

Only 3 shows of the 72 unique series evaluated featured senior characters within +2% points of U.S. Census (19.9%).

Over one fifth of the 72 episodes studied (22%, n=16) failed to include one senior speaking character on screen.

Seniors account for a mere 8.2% (n=50) of all series regulars, which did not differ by sample type.

Gender. As age increases, the percentage of female speaking characters on screen significantly decreases. Females were cast in less than 30% (27.8%) of all roles involving characters 60 years old or over. A full 38 (52.8%) of the 72 programs studied were missing senior women altogether on screen.

Turning to series regulars, of the 72 unique episodes evaluated, a full 41.2% were female and 58.8% were male.

Race/Ethnicity. Across the 72 unique shows, 72.2% of senior characters are White, 14.6% Black/African American, 6.6% Hispanic/Latino, 1.3% Asian, and 5.3% from Mixed Race/Other groups. There were no meaningful differences by sample in the proportion of senior characters within each racial/ethnic group.

Combined, 27.8% of the senior characters across 72 popular shows were from underrepresented racial/ethnic groups (i.e., Black, Latino, Asian, Other).

Not one show across 72 popular series featured a senior female Asian speaking character. Hispanic/Latino female seniors were missing from 70 out of 72 shows. Finally, 64 series did not feature one Black senior female speaking character.

Across 72 popular shows, 28.2% of senior male series regulars were from an underrepresented racial/ethnic group. In the total sample, the percentage of underrepresented senior female series regulars was 27.3%.

LGBT. Focusing on the overall sample of 72 shows, seniors accounted for 4 out of the 48 LGBT series regulars. Of these, 3 were male (2 bisexual, 1 gay) and 1 was a transgender female. In terms of invisibility, 68 out of 72 shows were devoid of senior LGBT series regulars.

Behind the Camera. A total of 296 content creators worked behind the scenes across the 72 unique episodes coded. Of these, 83.1% were male and 16.9% were female. A mere 8.2% were from underrepresented racial/ethnic groups and 12.6% were 60 years of age and above.

Focusing on directors, a total of 75 helmers were attached to the sample of 72 episodes. One-quarter (25.3%, n=19) were age 60 or older. Two directors age 60 and older were female and 17 were male. Combining age, race/ethnicity, and gender, only 5 were underrepresented directors (4 males, 1 female) age 60 or above across the 72 shows.

A full 121 writers were credited across the 72 episodes, with 5% (n=6) age 60 or above. One of these senior writers was female. Looking across gender, race/ethnicity, and age, 0 writers 60 years of age and above were underrepresented across the 72 top series among 18-49 year olds and audiences 65 and above.

Finally, we assessed demographic attributes of showrunners associated with the 72 programs. Of the 100 showrunners, 11% were 60 years of age or older. Ten of these individuals were male and 1 was female. No underrepresented showrunners aged 60 and above worked behind the camera across the 72 episodes coded.

#2 What is the Employment Status of Seniors on Popular Television?

Every senior speaking character was evaluated for the presence of a job. Overall, 70.8% (n=109 of 154) of seniors were depicted with an occupation. Females (62.8%) were less likely than males (73.9%) to be shown working across the sample.

Across 72 popular shows, 82.8% of high clout positions were held by male seniors and 17.1% were held by females. This is a gender ratio of 4.83 males to every one female. Nearly one-third (31.4%, n=11) of high-status occupational roles were held by characters from underrepresented racial/ethnic groups.

Across the sample, the majority of female seniors with clout were women from underrepresented racial/ethnic groups.

Employed main senior characters across the sample were more likely to be in supportive collegial relationships (42.9%) than in strained relationships (10.7%). Male characters (46.5%) were more likely than female characters (30.8%) to be depicted in supportive collegial relationships.

#3 What is the Health Profile of Senior Characters on Television?

A total of 7.8% (*n*=12 of 154) of senior characters had a health issue across the 72 series evaluated. Every one of these characters was male. One-quarter (*n*=3) of seniors with a health issue were from underrepresented racial/ethnic groups.

Few senior characters died across the samples of content. Just 5.8% (*n*=9) of senior characters perished in the 72 programs sampled. Across the sample, only male senior characters died. All of the seniors were felled by violence. This included being shot, stabbed, attacked by a bear, hanged, or the victim of an explosion.

#4 What Type of Relationships do Senior Characters Have with Their Families?

The nature of familial relationships was assessed for leading, supporting, and series regular senior characters across the 72 series evaluated. Of 70 main senior characters in the sample 44.3% (*n*=31) had family relationships and 51.4% (*n*=36) lacked these ties.

Senior characters' familial ties were further examined to determine whether the character was a grandparent. Across 72 popular shows, 15.6% (*n*=24 of 154) of seniors were grandparents. Of senior grandparents, 29.2% were female, and 70.8% were male.

#5 What is the Media and Technology Use Profile of Senior Characters on Television?

Looking first at media consumption, 20% of main senior characters used any form of media while 80% did not. Among seniors in the sample, half (*n*=7) of seniors using media read or watched news content, and 57.1% (*n*=8) watched television.

Nearly half (47.1%, *n*=33) of main senior characters across all 72 series used some form of technology. One-third of female seniors (33.3%, *n*=6 of 18) were shown with technology versus half of male seniors (51.9%, *n*=27 of 52).

Across the sample, 72.7% (*n*=24) of the seniors were shown utilizing a cell phone and more than one-third (39.4%, *n*=13) engaged with a computer.

#6 What Type of Language is Used to Refer to Senior Characters on Television?

A total of 39 series across all 72 evaluated featured main senior characters. Of those series, 41% (*n*=16 of 39) had one or more ageist comments.

Across all 16 series with an ageist comment, half of the programs were dramas and half were comedy or animated series (i.e., *The Simpsons*).

Ageist comments were sorted into descriptive categories. The largest category was comments that reference age in a general or non-specific manner. Thirteen or 81.3% of series with ageist comments across the full sample fit into this category. Examples of comments in this category include: "Your parents are old. Anything unspeakable was finished by 9:30," "Things just sound creepier when you're old," "You like the color? It's called 'ancient ivory,' like you," or referring to a character as "Caveman."

The second category related to physical and mental well-being. Here, 50% (n=8) of series with ageist comments referenced senior characters' health or abilities. This category included comments such as: "I need to write down all these precious moments before I forget them," or "We're elderly, so, uh, you know, we'll just sit here and suffer."

A handful of other comments related to appearance and traditionality. Just 12.5%, (n=2) of series with ageist comments mentioned these aspects of aging. One example of this was referring to a character as a "wrinkled old bastard." Finally, 3 series (18.8%) contained ageist comments related to death.

Shows without a 60-plus writer were more likely to feature an ageist comment than shows *with* senior writers. A full 81.2% (n=13) of series with ageist comments were written by a writer younger than 60, while 18.8% (n=3) of series with an ageist comment had a senior writer.

The same held true for showrunners. Three-quarters (n=12) of series with ageist comments had showrunners younger than age 60. The remaining 25% of series with ageist comments had showrunners age 60 or older.

T he global population is aging, and the U.S. is no exception. Representing 17.8% of Americans in 2010, individuals age 60 and older were 19.9% of the U.S. population in 2015.[1] As the number of older Americans increases, so do challenges related to health care, the workforce, housing, and public entitlement programs, to name a few.[2] Alongside these subjects, an aging citizenship confronts our beliefs and conceptions about what it means to grow older.

One vehicle that may contribute to views on aging is entertainment. Storytelling may communicate ideas or stereotypes about seniors that capture the attention of audiences. Media—especially television—claims a large part of the lives of older individuals. Nielsen estimates that in the first quarter of 2017, Americans age 65 and older spent over 50 hours per week watching TV.[3]

Given the time seniors devote to this medium, it is important to consider the messages TV transmits regarding its audience. This is particularly the case following our previous studies of top-grossing movies[4] and Academy Award-nominated films.[5] Conducted in partnership with Humana, these reports revealed that senior characters were rare and ridiculed in mainstream and critically-acclaimed films. Thus, the goal of the present investigation is to assess the prevalence and portrayal of senior characters in popular television programming.

To that end, the study is comprised of two samples of popular television series airing between June 1, 2016 and May 31, 2017.[6] Popularity was determined based on Nielsen Average Audience Rating Percentages during this time frame. The first sample included the 50 most popular television series among viewers age 18 to 49 (see Appendix A for the list of shows). The series were drawn from broadcast (i.e., ABC, CBS, NBC, CW, FOX), basic cable (i.e., AMC, Comedy Central, FX), and premium cable outlets (i.e., HBO). This sample was chosen to assess the agenda mainstream content may be setting about the lives of seniors on screen.

The second sample includes the 50 most popular television series among viewers age 65 and older (see Appendix B for the list of shows). The vast majority of these programs aired on broadcast channels and only two series aired on basic cable (i.e., TNT). This content was analyzed to understand how senior viewers may see themselves and their stories about aging reflected in television narratives.

While two samples of content were analyzed, it is important to note that 28 series were popular with viewers 18-49 **and** those 65 and older. Because of this, we present the findings in two specific ways. First, we discuss overall trends for the 72 unique series across both samples.

Second, the differences between samples are noted when they deviate by 5% on key measures. This comparison facilitates an understanding of the frequency and nature of portrayals viewers are exposed to in both demographic groups. Due to the overlap between samples and the small number of characters included in some analyses, however, caution should be exercised when interpreting differences between the 18-49 and 65-plus samples.

Both quantitative and qualitative methods were used in the study to evaluate the prevalence and portrayal of senior char-

acters in popular TV content. Quantitatively, we assessed every speaking or named character on screen in one episode of the 72 series in the sample.[7] Speaking characters were evaluated across a variety of demographic attributes and other manifest features.[8] Following this, a series of questions assessed the depiction of characters age 60 and older.[9] Finally, an in-depth qualitative analysis of main senior characters was performed. Main senior characters consisted of leading and supporting senior characters and senior series regulars. For this deeper dive, a second episode of the series was included to provide greater contextual assessment of characters 60 and above.[10]

The results are reported across multiple areas of inquiry. The prevalence and demographic profile of senior characters is overviewed first. Here, we contextualize the portrayal of seniors on screen by focusing on their frequency as well as the distribution of depictions by gender, race/ethnicity, LGBT standing, employment patterns, and workplace participation. Next, the health status of senior characters is explored including the use of assistive devices and death of senior characters. The relationships of senior characters also are assessed with a focus on family relationships, and a specific look at grandparent status. Fifth, the media use and technology profile of seniors is explored. Finally, the use of ageist language toward and about senior characters is analyzed.

One additional caveat is important to note. All demographic groups were included in the analyses. Due to the fact that this paper is on aging, the findings and comparisons focus primarily on characters 60 and above. Only a few deviations from other groups are presented in the results. For interested readers, however, we include complete demographic information in all the tables below.

#1

WHAT IS THE DEMOGRAPHIC PROFILE
OF SENIORS ON POPULAR TV?

Out of 1,609 speaking characters evaluated, a total of 151 (9.4%) were age 60 and above in the 72 unique TV series analyzed. This point statistic is below (-10.5%) U.S. Census (19.9%).[11] Very little deviation appeared across the samples. Just 9.5% (*n*=107) of characters were seniors in shows popular with viewers 18-49 and 9.8% (*n*=112) of characters were seniors in programs popular with viewers 65 and older (see Table 1).

Across the five age groups shown in Table 1, only one meaningful difference emerged. Zero to 20 year olds (13.1%) were more likely to be depicted in shows popular with 18 to 49 year olds than in shows popular with audiences 65 years of age and older (7.6%).

Overall point statistics for seniors on screen are informative. However, they do not reveal the density of senior characters *across* and *within* popular TV programming. For instance, some shows may feature only one or two senior characters whereas others may saturate the cast with characters 60 and above. Only focusing on a total percentage misses this important deviation. To capture this variability, two additional analyses were executed.

The first analysis focused on proportional representation. Proportional representation captures the number of shows featuring senior characters within ±2 percentage points from U.S. Census (19.9%).[12] As illustrated in Table 2, only 3 of the 72 unique episodes evaluated met this criterion. The samples each featured 2 programs with proportional representation

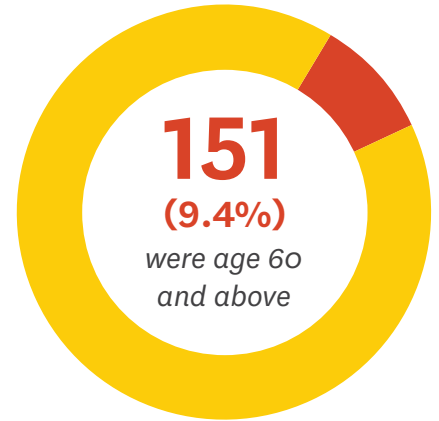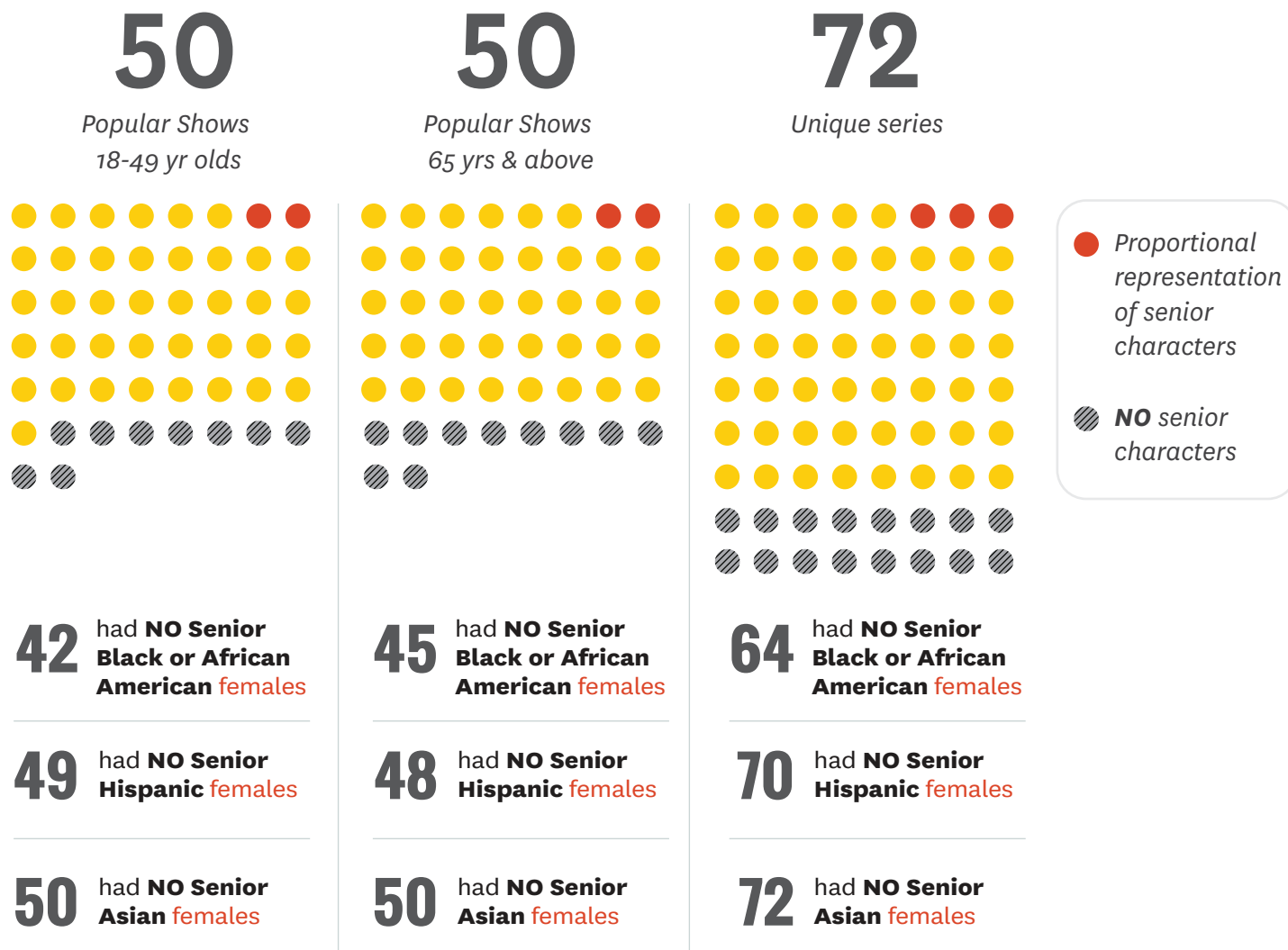*Out of*

1,609

speaking characters...

151
(9.4%)

were age 60 and above

TABLE 1
SPEAKING CHARACTERS' AGE BY SAMPLE TYPE

AGE GROUPING	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	OVERALL
0-20 YEARS	13.1%	7.6%	11.4%
21-39 YEARS	46.2%	50.8%	47.2%
40-59 YEARS	31.2%	31.8%	31.9%
60 YEARS AND ABOVE	9.5%	9.8%	9.4%
# OF CHARACTERS	1,129	1,147	1,609
# OF TV SHOWS	50	50	72

Note: Each column sums to 100% within age grouping. The overall column represents unique shows in the sample. Twenty-eight of the same shows are included in both samples (18-49 years, 65 years and above) of popular content.

(see Table 2). The second analysis explored invisibility. Here, the total number of programs that were completely devoid of senior speaking characters was calculated. Over one fifth of the 72 episodes (22%) failed to include one senior speaking character on screen. Nine (18%) shows popular with 18-49 year olds and 10 (20%) shows popular with audiences 65 and older did not portray a single senior speaking character on screen (see Table 2).

TABLE 2
PROPORTIONAL REPRESENTATION & INVISIBILITY OF SENIOR CHARACTERS ACROSS TWO SAMPLES

50
Popular Shows 18-49 yr olds

50
Popular Shows 65 yrs & above

72
Unique series

● *Proportional representation of senior characters*

▨ *NO senior characters*

42 had **NO Senior Black or African American** females	**45** had **NO Senior Black or African American** females	**64** had **NO Senior Black or African American** females
49 had **NO Senior Hispanic** females	**48** had **NO Senior Hispanic** females	**70** had **NO Senior Hispanic** females
50 had **NO Senior Asian** females	**50** had **NO Senior Asian** females	**72** had **NO Senior Asian** females

Moving from all speaking characters, we also measured the age of series regulars. A series regular is usually depicted across multiple episodes of a TV series.[13] As shown in Table 3, 8.2% (*n*=50) of all series regulars were seniors, which did not differ by sample type. Seniors account for 7% (*n*=32) of series regulars in shows popular with 18 to 49 year olds and 9.8% (*n*=39) of series regulars in shows popular with those 65 years of age and older.

Two additional findings pertaining to series regulars by age grouping are important to note. Zero to 20 year olds were more likely to be series regulars in the 18-49 sample than in the 65 and older sample. A reverse trend emerged for 21-39 year olds.

TABLE 3

TABLE 3

SERIES REGULARS' AGE BY SAMPLE TYPE

AGE GROUPING	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	OVERALL
0-20 YEARS	13.1%	5.3%	10.8%
21-39 YEARS	48.1%	55.1%	50.3%
40-59 YEARS	31.7%	29.8%	30.7%
60 YEARS AND ABOVE	7%	9.8%	8.2%
# OF CHARACTERS	457	399	612

Note: Among age group levels, each column sums to 100%.

In sum, senior characters were underrepresented—relative to U.S. Census—on screen in popular TV shows. This is true of speaking characters as well as series regulars. Further, few shows portray proportional representation of senior characters and over a fifth were completely missing the senior demographic on screen. In the next section, we contextualize these findings by examining how age grouping intersects with gender, race/ethnicity, and sexuality across the two samples of TV content.

Gender. Just over 40% of the speaking characters evaluated across the 72 unique shows were female, which did not differ by sample type (see Table 4). This translates into a gender ratio of 1.49 males to every one female. The admixture of age grouping by gender reveals a powerful story for senior characters. As age increases, the percentage of female speaking characters on screen significantly decreases. Matter of fact, females were cast in less than 30% of all roles involving characters 60 years or older. This is in stark contrast to the fact that gender parity is achieved among 0 to 20 year olds across each sample.

TABLE 4

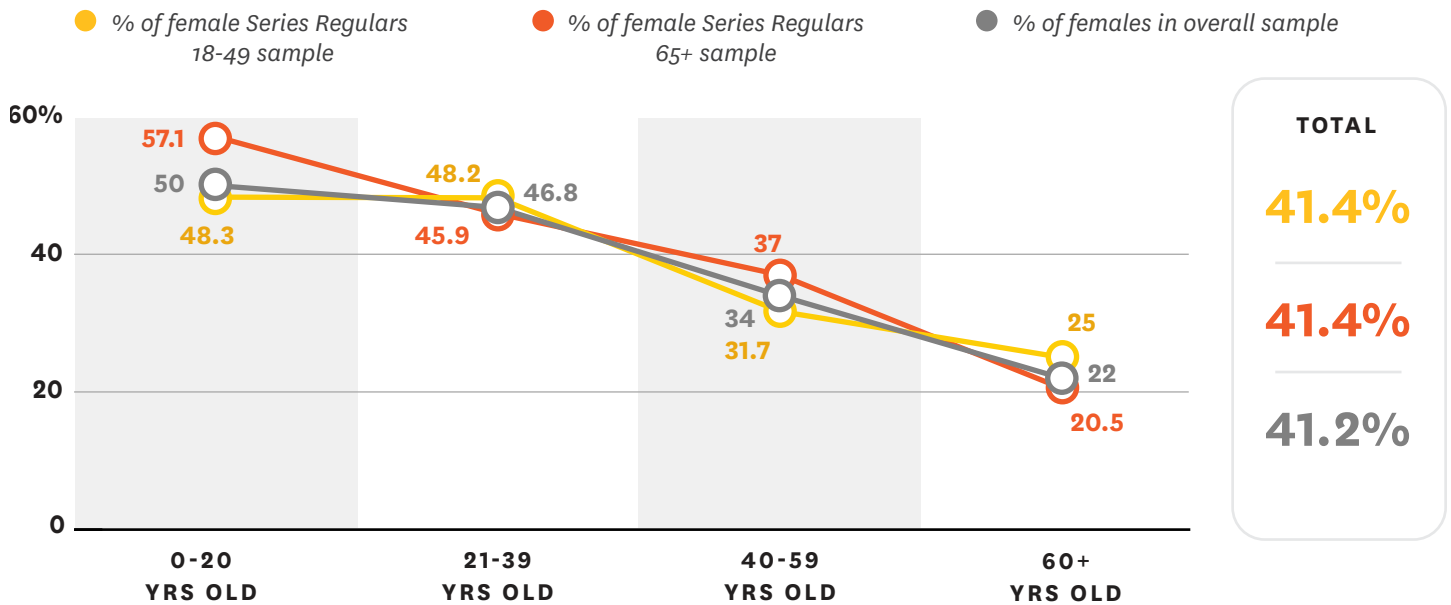FEMALE SPEAKING CHARACTERS BY AGE GROUP AND SAMPLE TYPE

SAMPLE TYPE	0-20	21-39	40-59	60+	TOTAL
% OF FEMALE CHARACTERS 18-49 SAMPLE	50.7%	43.9%	34.7%	29%	40.5%
% OF FEMALE CHARACTERS 65+ SAMPLE	54%	44.6%	33.7%	26.8%	40.1%
% OF FEMALE IN OVERALL SAMPLE	51.6%	43.8%	34.2%	27.8%	40.1%

Note: Each column represents the percentage of females within age grouping per sample. The percentage of males is obtained by subtracting the percentage of females from 100%.

Given the infrequency of senior women, it was important to assess how many were completely missing across popular programming. To this end, we conducted another invisibility analysis. ***The results show that 38 (52.8%) of the 72 programs were missing senior women altogether on screen***. Twenty-five (50%) of the 50 most popular shows among 18 to 49 year olds did not feature one senior female during the episode coded. Among the 50 most popular shows watched by audiences 65 years of age or older, 26 (52%) programs were completely missing senior women.

Turning to series regulars, a full 41.2% were female and 58.8% were male. This is a ratio of 1.43 males to every one female. Looking at age and gender reveals a particularly problematic picture in popular television. Only 22% of senior series regulars were female, which recalibrates the gender ratio to 3.54 males to every 1 female. There is little deviation by sample (>5%), as noted in Table 5.

TABLE 5
FEMALE SERIES REGULARS BY AGE GROUP AND SAMPLE TYPE

● % of female Series Regulars 18-49 sample   ● % of female Series Regulars 65+ sample   ● % of females in overall sample

	0-20 YRS OLD	21-39 YRS OLD	40-59 YRS OLD	60+ YRS OLD	TOTAL
18-49 sample	48.3	48.2	31.7	25	41.4%
65+ sample	57.1	45.9	37	20.5	41.4%
overall sample	50	46.8	34	22	41.2%

Note: Each column represents the percentage of females within age grouping per sample. The percentage of males is obtained by subtracting the percentage of females from 100%.

Together, this section revealed that senior women were far more likely to be underrepresented than their senior male counterparts. Further, half or more shows across the two samples failed to depict one senior female on screen in a speaking role! The representational roadblock facing senior women becomes even more pronounced as we consider race/ethnicity, the focus of the next section of the report.
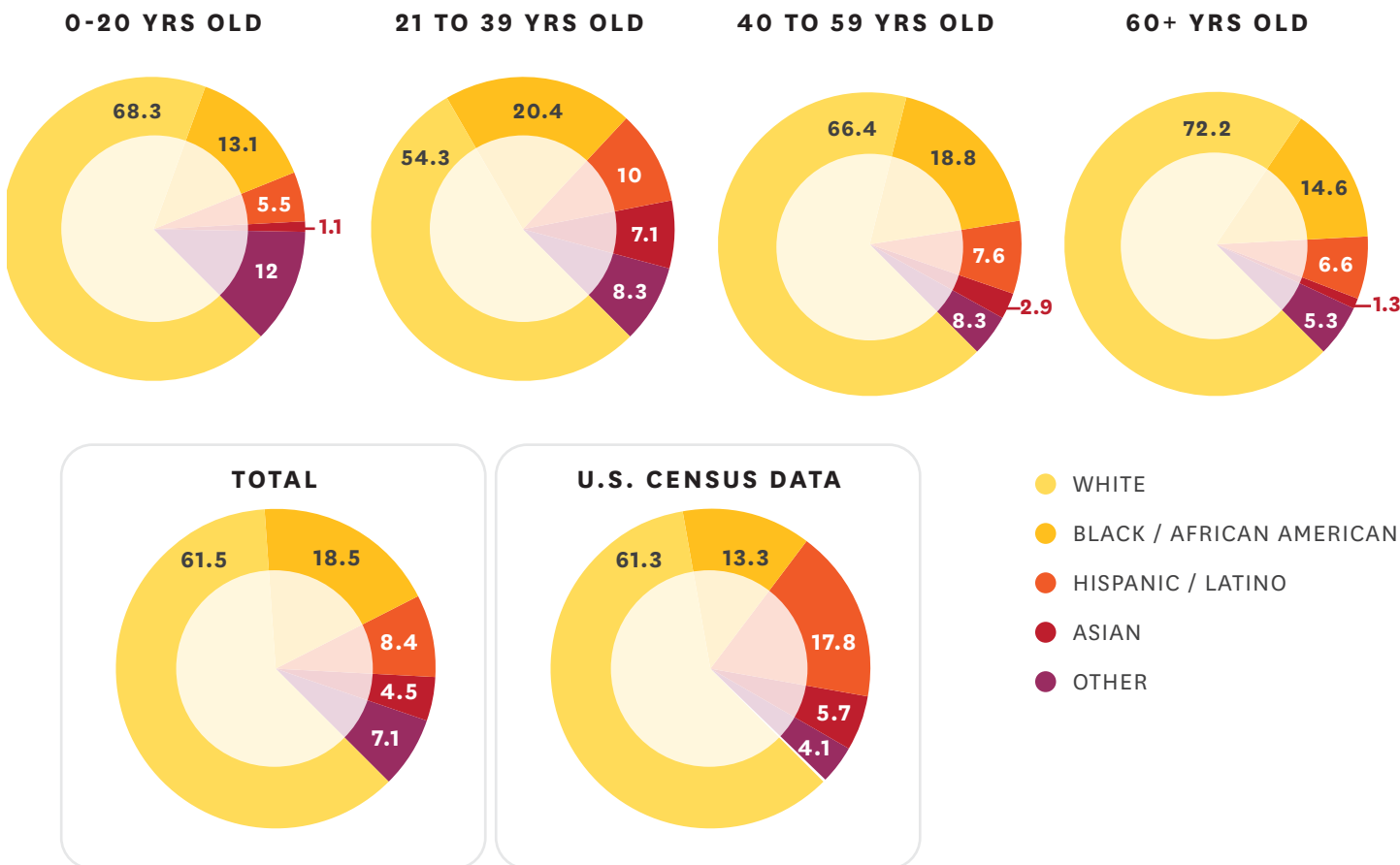
Race/Ethnicity. Overall, a full 61.5% of speaking characters were White, 18.5% Black, 8.4% Hispanic/Latino, 4.5% Asian, and 7.1% Mixed Race/Other (see Table 6). The overall sample of 72 unique shows did not differ from the other two samples (18-49 year olds, 65 years and older). As such, the tables for the age-based samples are not included in the report but can be found in the footnotes section. Combined, 38.5% of the characters across 72 popular shows were from underrepresented racial/ethnic groups. This is on par with U.S. Census (38.7%).[14] Yet, Black characters were overrepresented on screen and Latino characters were underrepresented (see Table 6).

Focusing on race/ethnicity by age, Table 6 reveals that characters 60 years of age and older were overwhelmingly White (72.2%) in comparison to the percentage of White characters sample wide (61.5%) or in the 21-39 or 40-59 age groupings. Only 1.3% of characters age 60 and above on screen were Asian.

Now, we turn our attention to incorporating gender into our intersectional analyses by race/ethnicity and age. To do so, we first bifurcate race/ethnicity of characters in the sample into two categories: underrepresented vs. not underrepresent-

ed. Then, we run the analyses of underrepresented character status (no, yes) by age grouping within gender. We examine males and females separately, given the pronounced differences noted above.

TABLE 6
CHARACTER RACE/ETHNICITY BY AGE: OVERALL SAMPLE

0-20 YRS OLD
68.3 13.1 5.5 1.1 12

21 TO 39 YRS OLD
54.3 20.4 10 7.1 8.3

40 TO 59 YRS OLD
66.4 18.8 7.6 2.9 8.3

60+ YRS OLD
72.2 14.6 6.6 1.3 5.3

TOTAL
61.5 18.5 8.4 4.5 7.1

U.S. CENSUS DATA
61.3 13.3 17.8 5.7 4.1

- WHITE
- BLACK / AFRICAN AMERICAN
- HISPANIC / LATINO
- ASIAN
- OTHER

Note: Among age group levels, each column sums to 100%. The sample includes 72 unique shows. Data from U.S. Census is retrieved from https://www.census.gov/quickfacts/.

Slightly more than one-quarter (27.5%) of male seniors were from underrepresented racial groups overall. This is lower than the overall percentage of racially or ethnically diverse male characters (see Table 7). Two additional patterns are worth noting. The largest percentage of underrepresented males in the sample was found among characters 21-39 years of age. Surprisingly, males age 0-20 were least likely to be from underrepresented racial/ethnic groups.

TABLE 7
UNDERREPRESENTED MALE SPEAKING CHARACTERS BY AGE GROUP AND SAMPLE TYPE

SAMPLE TYPE	0-20	21-39	40-59	60+	TOTAL
% OF UR CHARACTERS 18-49 SAMPLE	23.6%	38.9%	32.3%	28.9%	33.8%
% OF UR CHARACTERS 65+ SAMPLE	28.2%	42.8%	32.8%	30.5%	37%
% OF UR CHARACTERS IN OVERALL SAMPLE	26.1%	41.9%	31.8%	27.5%	35.3%

Overall, 28.6% of senior women were from underrepresented racial/ethnic groups (see Table 8). This pattern was consistent across both programs popular with viewers 18-49 and viewers 65 and older. These samples differed from each other—senior females in TV series popular with younger viewers were more likely to be from underrepresented racial/ethnic groups than senior females in series popular with viewers 65 and older. See Table 8. Senior women were also the least likely to be from an underrepresented racial/ethnic group across all age groups evaluated. Half of female characters age 21-39 were from diverse racial/ethnic groups, however.

TABLE 8
UNDERREPRESENTED FEMALE SPEAKING CHARACTERS BY AGE GROUP AND SAMPLE TYPE

SAMPLE TYPE	0-20	21-39	40-59	60+	TOTAL
% OF UR CHARACTERS 18-49 SAMPLE	40%	48.2%	36.1%	35.5%	42.7%
% OF UR CHARACTERS 65+ SAMPLE	36.2%	50.8%	37.4%	26.7%	44.1%
% OF UR CHARACTERS IN OVERALL SAMPLE	36.8%	50.6%	36.9%	28.6%	43.4%

To further understand the portrayal of senior characters, an invisibility analysis of underrepresented females aged 60 and above was undertaken. Each show was scrutinized for the presence of any senior female speaking character from three racial/ethnic groups: Black/African American, Hispanic/Latino, and Asian. The results are presented in Table 2.

Not one program in the sample featured a senior Asian female speaking character. Hispanic/Latino female seniors were missing from nearly all of the shows included in the sample as well (70 out of 72, 97.2%). Finally, 64 series did not feature one Black senior female speaking character in the first episode. These findings reveal the pronounced erasure of senior females from different racial/ethnic backgrounds in popular television programming. Despite the attention and accolades that television receives for being more inclusive, our data shows complete failure when it comes to portraying diverse female characters aged 60 and above.

In addition to all speaking characters, the race/ethnicity of series regulars by age and gender was assessed. Here, male and female series regulars were again analyzed separately (see Tables 9 and 10). Overall, senior series regulars were less diverse (28.2%) than all speaking characters across 72 series (34.5%). Series regulars that were senior males (29%) were also less likely to be from an underrepresented racial/ethnic group than the percentage of all characters in shows popular with audiences age 65 and above (38%).

For female series regulars, a few notable sample differences emerged. Female seniors were less likely to be diverse in comparison to the sample wide norm of underrepresented series regular females across all 72 shows (39.3%). Only a quarter of female senior series regulars in the 65-plus sample were from underrepresented racial/ethnic groups—this was the lowest percentage among male and female series regular seniors across both samples. In contrast, 37.5% of senior female series regulars in the 18-49 sample were from underrepresented groups. This was the highest percentage among senior series regular males and females.

TABLE 9

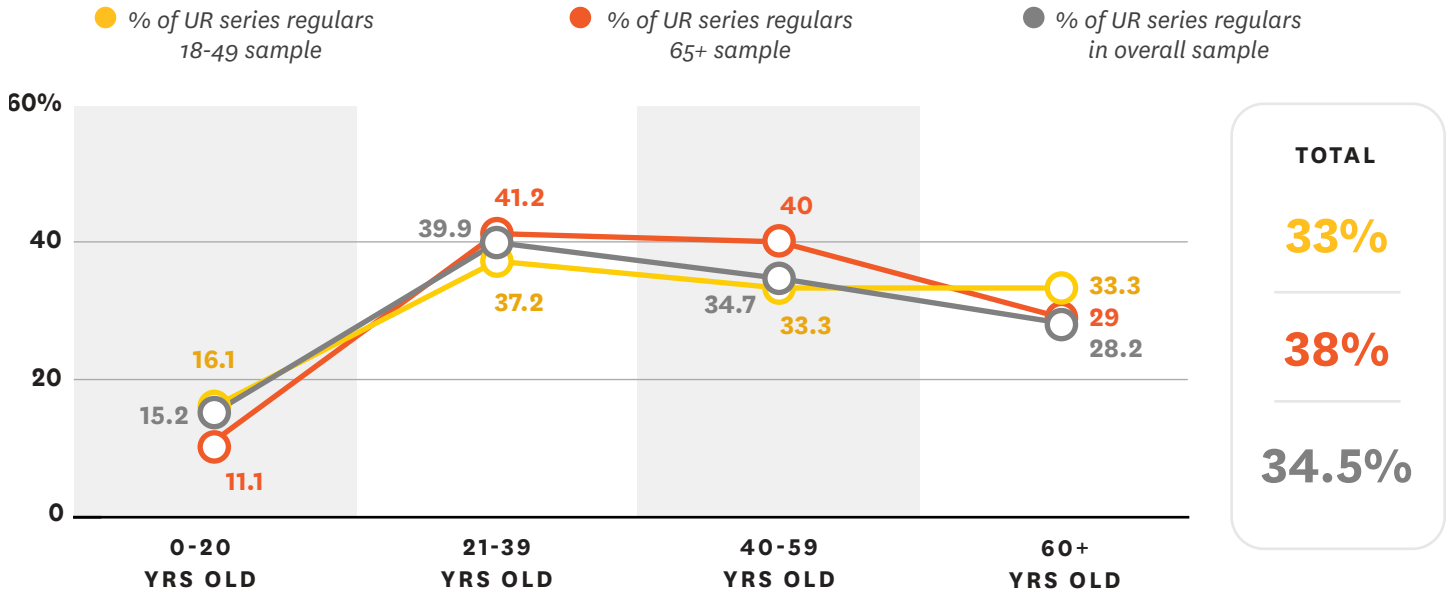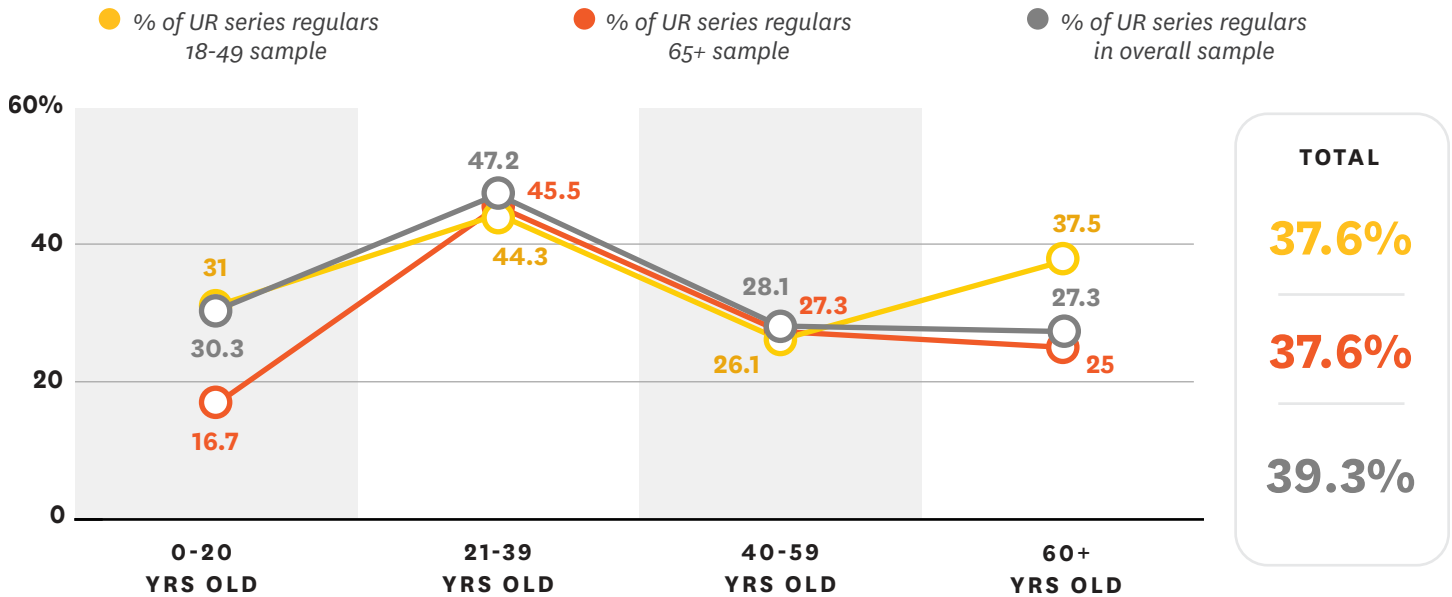## UNDERREPRESENTED MALE SERIES REGULARS BY AGE GROUP AND SAMPLE TYPE

● % of UR series regulars
18-49 sample

● % of UR series regulars
65+ sample

● % of UR series regulars
in overall sample

Chart — UR Male Series Regulars by Age Group

	0-20 YRS OLD	21-39 YRS OLD	40-59 YRS OLD	60+ YRS OLD	TOTAL
% 18-49 sample	16.1	37.2	33.3	33.3	33%
% 65+ sample	11.1	41.2	40	29	38%
% overall sample	15.2	39.9	34.7	28.2	34.5%

TABLE 10

UNDERREPRESENTED FEMALE SERIES REGULARS BY AGE GROUP AND SAMPLE TYPE

● % of UR series regulars
18-49 sample

● % of UR series regulars
65+ sample

● % of UR series regulars
in overall sample

Chart — UR Female Series Regulars by Age Group

	0-20 YRS OLD	21-39 YRS OLD	40-59 YRS OLD	60+ YRS OLD	TOTAL
% 18-49 sample	31	44.3	26.1	37.5	37.6%
% 65+ sample	16.7	45.5	27.3	25	37.6%
% overall sample	30.3	47.2	28.1	27.3	39.3%

The analyses regarding race/ethnicity revealed that most senior speaking characters and series regulars in popular television programming were still white and male. Very few female seniors were from underrepresented racial/ethnic groups and not one senior Asian female speaking character appeared in either sample. Clearly, whether viewers are 18 or 80, popular content presents a problematic and skewed picture of aging.

LGBT. To examine LGBT status, the focus was on series regulars rather than all speaking characters. This was because infor-

mation about a character's sexuality or gender identity might not be revealed in the first episode coded.[15] A full 48 (7.8%) series regulars were LGBT in the sample of 72 unique shows (see Table 11). This is higher than U.S. population estimate (3.5%) or what we typically see in cinematic content (1.1%).[16]

TABLE 11

LGBT SERIES REGULARS BY AGE GROUP ACROSS OVERALL SAMPLE
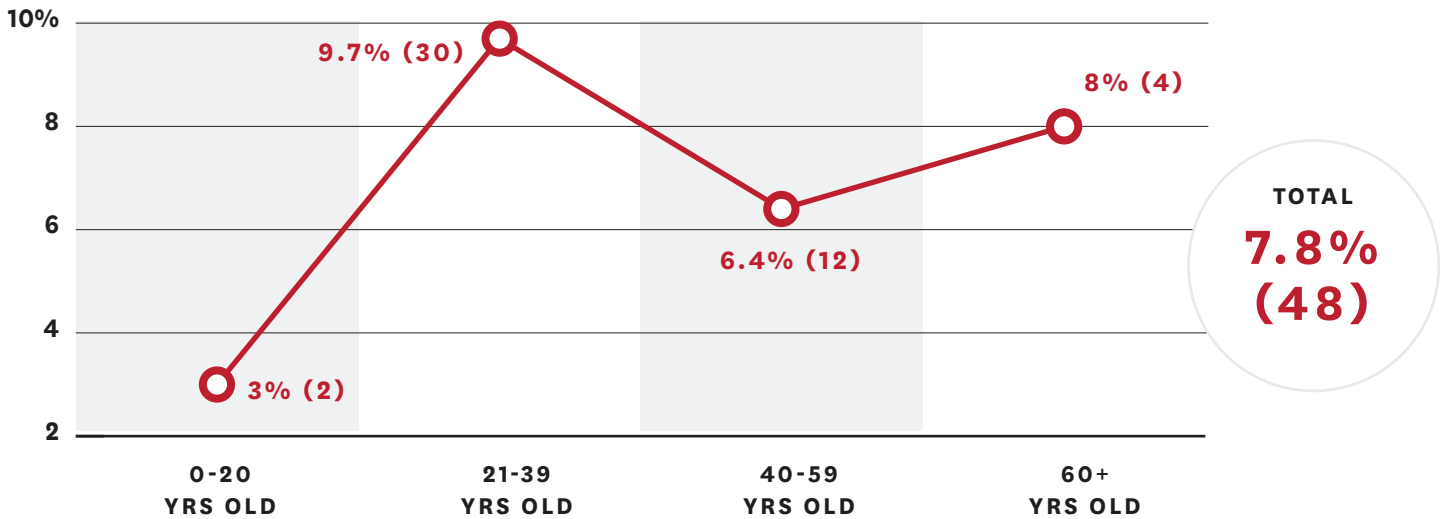
Focusing on the overall sample of 72 shows, seniors account for 4 out of the 48 LGBT series regulars. Of these, 3 were male (2 bisexual, 1 gay) and 1 was a transgender female. Three out of the four characters were White and 1 was Black. The lowest number of LGBT series regulars was observed for 0 to 20 year olds. Only 2 portrayals or 3% of series regulars within this age grouping were LGBT. Looking at the two samples of popular content in Table 12, senior LGBT series regulars do not differ from sample wide norms.

TABLE 12

LGBT SERIES REGULARS BY AGE GROUP AND SAMPLE TYPE

SAMPLE TYPE	0-20	21-39	40-59	60+	TOTAL
% OF LGBT CHARACTERS 18-49 SAMPLE	3.3%	9.5%	7.6%	9.4%	8.1%
% OF LGBT CHARACTERS 65+ SAMPLE	0	5.9%	5%	7.7%	5.5%

Assessing invisibility, a full 42 episodes (58.3%) out of 72 did not depict a LGBT series regular. In total, 68 (94.4%) out of 72 shows were devoid of senior LGBT series regulars.

Taken together, senior characters in popular television programming were primarily White, straight, and male. Senior females—particularly those from underrepresented racial/ethnic groups—were rarely depicted on screen. These trends are disconcerting, particularly as senior women outnumber senior men in the U.S.[17] The lack of representation among this segment of the television audience suggests that seniors rarely see themselves or their stories reflected on screen. In the next section of the report, we take a look at who is calling the shots behind the camera (i.e., directors, showrunners, writers) by gender, race/ethnicity and age—which offer insight into why these patterns may exist.

Behind the Camera. A total of 296 content creators worked behind the scenes across the 72 unique episodes coded. Of these, 83.1% were male and 16.9% were female. A mere 8.2% were from underrepresented racial/ethnic groups and 12.6% were 60 years of age and above. As with all our analyses, only presenting the findings variable by variable fails to reveal patterns of intersectionality. Consequently, we delineate below the age grouping and gender of key personnel working behind the camera. Race/ethnicity of underrepresented content creators is then highlighted within these results. We only examine content creators in the sample of 72 shows, to avoid double counting that would occur due to the overlap across series popular with 18-49 year olds and individuals 65 years of age and older.

TABLE 13
DIRECTOR AGE & GENDER: OVERALL SAMPLE

	30-39 YRS OLD	40-49 YRS OLD	50-59 YRS OLD	60-69 YRS OLD	70-79 YRS OLD	TOTAL
♂	4	20	27	13	4	68 (90.7%)
♀	1	1	3	1	1	7 (9.3%)

Focusing on directors, a total of 75 helmers (90.7% male, 9.3% female) were attached to the sample of 72 episodes. This is a gender ratio of 9.7 male directors to every 1 female director. The age breakdown of directors by gender can be found in Table 13. Most directors were between 40 and 69 years of age. Among male directors, 11 were underrepresented (5 Black, 3 Asian, and 3 Latino). Among female directors, 2 were diverse and both women were Black. ***Combining age, race/ethnicity, and gender, only 5 were underrepresented directors (4 males, 1 female) age 60 or above across the 72 shows.***

TABLE 14
WRITER AGE & GENDER: OVERALL SAMPLE

	20-29 YRS OLD	30-39 YRS OLD	40-49 YRS OLD	50-59 YRS OLD	60-69 YRS OLD	TOTAL
♂	0	16	43	31	5	95 (78.5%)
♀	2	6	10	7	1	26 (21.5%)

A full 121 writers were credited across the 72 episodes, with 78.5% men and 21.5% women (see Table 14).[18] Only two writers worked in their 20s and both were women. A mere 6.7% of writers were underrepresented. Of the male writers (*n*=95), 5 were from underrepresented backgrounds (4 Black, 1 Latino). Of the female writers (*n*=26), only 3 were diverse (1 Black, 1 Asian, 1 Latino). ***Looking across gender, race/ethnicity, and age, 0 writers 60 years of age and above were underrepresented across the 72 top series among 18-49 year olds and audiences 65 and above.***

Finally, we assessed demographic attributes of showrunners associated with the 72 programs. Just under a fifth were women (17%) and 83% were men, a gender ratio of 4.9 to 1. Only males were running the show in their 30s, as shown in Table 15. Focusing on showrunner race/ethnicity, only three (1 male, 2 females) were underrepresented and two were accounted for by one creator (Shonda Rhimes; *Grey's Anatomy*, *Scandal*). All three underrepresented showrunners were Black. ***No underrepresented showrunners aged 60 and above worked behind the camera across the 72 episodes coded.***

### TABLE 15
SHOWRUNNER AGE & GENDER: OVERALL SAMPLE

	30-39 YRS OLD	40-49 YRS OLD	50-59 YRS OLD	60-69 YRS OLD	70-79 YRS OLD	TOTAL
♂	10	35	28	9	1	83 (83%)
♀	0	7	9	1	0	17 (17%)

What is the relationship between content creator age and age of characters on screen in popular TV series? To answer this question, we bifurcated the sample of directors into two age groups: those 60 years of age and older vs. those under 60. Then, the percentage of speaking characters and series regulars by age (i.e., 60 years and above, under 60 years) was examined in these two groups. The same process was repeated for writers and showrunners.

Across 6 analyses, only one was statistically and meaningfully significant. As shown in Figure 1, showrunners 60 years of age or older depicted a higher percentage of senior series regulars on screen (+8.7%) than did showrunners under 60 years of age.[19] Because a similar trend did not emerge when assessing the age of all speaking characters on screen (60 and above vs. below 60 years) by showrunner age, the results should be interpreted cautiously.

The findings on behind-the-camera personnel reveal that few individuals age 60 and older participate in the creation of popular television shows. Understanding the makeup of behind the scenes teams provides an idea of why few seniors were depicted on screen. This is particularly the case given that no writers or showrunners over age 60 were from underrepresented racial/ethnic groups. Perhaps diversifying the portrayal of seniors on screen starts by employing older writers, showrunners, and directors behind the scenes.

FIGURE 1
SHOWRUNNER AGE BY SERIES REGULAR AGE
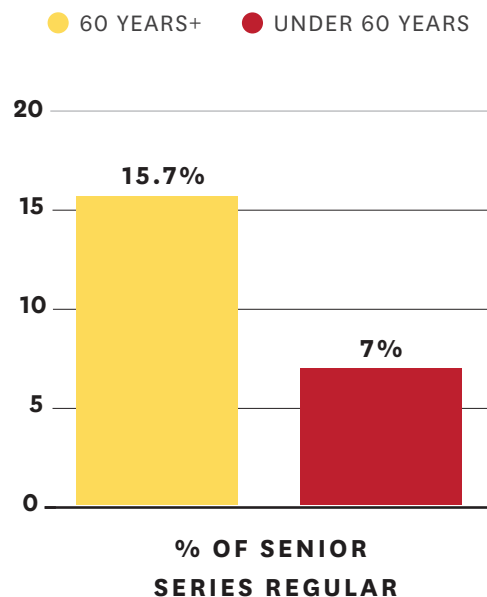
● 60 YEARS+   ● UNDER 60 YEARS

15.7% (60 YEARS+) 7% (UNDER 60 YEARS)

% OF SENIOR SERIES REGULAR

#2
WHAT IS THE EMPLOYMENT STATUS OF
SENIORS ON POPULAR TELEVISION?

Every senior speaking character was evaluated for the presence or absence of a job. In the qualitative analysis, this included 154 senior characters in 72 shows, with 108 in the 18-49 sample and 114 in the sample popular with viewers 65 and older.[20] Due to the overlap in senior characters across samples, results for qualitative analyses will be presented across the 72 unique series evaluated. Meaningful differences (5% or greater) between samples are noted.

Overall, 70.8% (*n*=109 of 154) of seniors were depicted with an occupation, which did not differ by sample (18-49=70.4%; 65+=73.7%). Females (62.8%) were less likely than males (73.9%) to be shown working across both samples. Underrepresented characters, by contrast, were slightly more likely to be employed than White characters. Nearly three-quarters (74.4%) of underrepresented seniors held a job compared to 69.4% of White characters.

TABLE 16

OCCUPATIONAL STATUS OF SENIOR CHARACTERS BY GENDER ACROSS TWO SAMPLES

MEASURE	MALES	FEMALES	WHITE	UNDER-REPRESENTED	OVERALL
% WITH A JOB	73.9%	62.8%	69.4%	74.4%	70.8%
% WITHOUT A JOB	26.1%	37.2%	30.6%	25.6%	29.2%
TOTAL	111	43	111	43	154

Note: Each column sums to 100%. The sample includes episodes from 72 unique shows.

The nature of each job was assessed qualitatively for two elements. The first was the sector of employment (e.g., Politics, Legal, Academia). The second was whether the position had clout or prestige attached to it. Clout refers to holding an occupational post at the top of a sector. Table 17 presents the percentage of seniors with high clout across eight sectors of employment for all 72 series included in the sample.

Male seniors (82.8%) held more high clout positions than female seniors (17.1%), with 4.83 senior males employed in prestigious roles for every 1 senior female. The legal sector was the only one to depict male and female seniors nearly equally in high clout positions. In the remaining sectors, 80% or more of the top jobs went to males. In politics, for example, the only high clout position for a senior female was a royal figure in *Game of Thrones*. In contrast, males served in roles such as President, Secretary of State, and member of Congress. One additional male character served as a royal/ruler. Thus, senior female characters were absent from attainable and prestigious political positions across 72 of the most popular series on television among adults age 18-49 and viewers age 65 and older.

These disparities carry into other sectors as well. To illustrate, male seniors held positions as doctors while the lone senior female with high clout in the medical field was a hospital administrator. In law enforcement, senior males worked as police and fire chiefs, a police commissioner, and a top general. The senior female with high clout in this sector served as CIA Di-

rector. Despite this, the contributions of female seniors across industries were rarely seen at the top of various industries.

TABLE 17
OCCUPATIONAL CLOUT OF EMPLOYED SENIOR CHARACTERS BY GENDER

MEASURE	MALES	FEMALES
% IN POLITICS (E.G., PRESIDENT, MEMBER OF CONGRESS)	88.8% (*n*=8)	11.1% (*n*=1)
% IN LAW (E.G., CHIEF JUSTICES, CITY ATTORNEY)	60% (*n*=3)	40% (*n*=2)
% IN LAW ENFORCEMENT (E.G., CHIEF OF CIA, MILITARY OFFICER)	85.7% (*n*=6)	14.3% (*n*=1)
% IN HEALTHCARE (E.G., SURGEON, PHYSICIAN)	83.3% (*n*=5)	16.7% (*n*=1)
% IN OTHER (E.G., RELIGION, ACADEMIA, HOUSING, ENERGY)	87.5% (*n*=7)	12.5% (*n*=1)
TOTAL	**82.8% (*n*=29)**	**17.1% (*n*=6)**

Note: Within sector, each row sums to 100%. The sample includes 72 unique shows. Sectors with four or fewer characters were collapsed to form the "Other" category.

In terms of race/ethnicity of seniors with top jobs, nearly one-third (31.4%, *n*=11 of 35) of high-status occupational roles were held by characters from underrepresented racial/ethnic groups. Notably, four underrepresented senior females held prestigious positions. This represents two-thirds of all employed senior females with high clout. These women (3 Black/African American, 1 Latina) included two judges, a hospital administrator, and one CIA director. The seven underrepresented senior males worked as a Chief Justice, a high-ranking government secretary, doctors, a police chief, and the owner of an oil company.

While the majority of senior characters on television had jobs, few were working in positions with power or prestige. The individuals inhabiting these roles were predominantly male. Notably, there was racial/ethnic diversity among those seniors holding high status jobs. Additionally, while there were few women with occupational prominence, the majority of female seniors with clout were from underrepresented racial/ethnic groups. Next, we turn toward the occupational context in which senior characters worked.

The following analyses, as well as others later in the report, focus on "main" senior characters. As noted earlier, main characters included only leading or supporting senior characters in the episode evaluated as well as senior series regulars. A total of 70 senior characters appeared in the full 72 programs examined. This included 45 main characters in the 50 series popular with viewers 18-49 and 56 main characters in the 50 series popular with viewers 65 and older.

Of the main senior characters across all 72 series, 80% (*n*=56) had a job and 20% (*n*=14) did not. This differed by sample. Main senior characters were more likely to be employed in the sample of content popular with viewers 65 and older (83.9%, *n*=47) than in the sample popular with viewers 18-49 (73.3%, *n*=33).

For those main senior characters with a job, mentions of *expertise* related to occupation were assessed. These statements referred to a character's knowledge, skill, or status. Few main senior characters (16.1%; *n*=9 of 56) were referenced as be-

ing experts across all 72 series. Only 1 female main senior character was coded with expertise, as she was called a "skilled psychiatrist." This same senior woman had high clout in the previous analysis. Additionally, the occupational prowess of one Black male and one Latino male character was mentioned.

The workplace relationships of senior main characters were also examined. Here, the goal was to determine if relationships between seniors and their colleagues were supportive, strained, or some combination of the two. A final category was used when not enough information was provided within the plot to discern the nature of seniors' relationships.

TABLE 18
RELATIONSHIPS OF EMPLOYED MAIN SENIOR CHARACTERS BY SAMPLE TYPE

RELATIONSHIP TYPE	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	TOTAL SERIES
SUPPORTIVE	36.4% (*n*=12)	46.8% (*n*=22)	42.9% (*n*=24)
STRAINED	15.2% (*n*=5)	14.9% (*n*=7)	10.7% (*n*=6)
SUPPORTIVE AND STRAINED	21.2% (*n*=7)	10.6% (*n*=5)	17.9% (*n*=10)
CAN'T TELL	27.3% (*n*=9)	27.2% (*n*=13)	28.6% (*n*=16)
TOTAL EMPLOYED SENIORS	**33**	**47**	**56**

As shown in Table 18, employed main senior characters were primarily in supportive relationships. Seniors in series popular with viewers age 65 and older were more likely to be in supportive relationships than characters in series popular with viewers age 18-49. This contrasts with supportive and strained relationships, which were more likely to occur in series popular with viewers 18-49 than viewers 65 and older. Male characters (46.5%) were more likely than female characters (30.8%) to be depicted in supportive collegial relationships.

The occupational profile of seniors in television contrasts with the real-world working life of older Americans. A full 70.2% of U.S. seniors are not part of the labor force,[21] but in television programming, seniors were overwhelmingly shown at work. This may be due to the nature of televised storytelling, which often focuses on the workplace (i.e., a hospital, legal office, police force). Along with the predominantly supportive relationships of seniors in occupational settings, these storylines may offer a counter stereotypical view of seniors, particularly to younger audiences.

#3
WHAT IS THE HEALTH PROFILE OF SENIOR CHARACTERS ON TELEVISION?

Managing health needs is a key component of aging. For example, 80% of adults 85 and older have, at minimum, one chronic health condition.[22] Additionally, one-third of Americans 65 years of age and older have one or more limitations on activities of daily living.[23] As such, it was important to understand whether television programming captured health challenges of senior characters. Across both samples of content, all speaking characters age 60 and above were evaluated for the presence of health issues.

A total of 7.8% (*n*=12 of 154) of senior characters had a health issue across the 72 series evaluated. There were no differences by sample as 8.3% (*n*=9) of seniors experienced health problems in shows popular with viewers 18-49 as did 7% (*n*=8) of seniors in programs popular with viewers 65 and older. All 12 of the characters who experienced a health issue were male. One-quarter (*n*=3) of seniors with a health issue were from underrepresented racial/ethnic groups.

The nature of health issues was assessed. Five seniors were in recovery from accidents or injuries, 4 were living with physical, mental, or communicative impairments (i.e., mobility, mental health), 2 had a physical illness (i.e., cancer), and 1 had a non-specific health issue.

TABLE 19

HEALTH ISSUES OF SENIOR CHARACTERS BY SAMPLE TYPE

HEALTH ISSUE	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS & ABOVE	TOTAL SERIES
PHYSICAL, MENTAL, COMMUNICATIVE IMPAIRMENT	44.4% (*n*=4)	12.5% (*n*=1)	33.3% (*n*=4)
PHYSICAL ILLNESS	22.2% (*n*=2)	12.5% (*n*=1)	16.7% (*n*=2)
RECOVERY	22.2% (*n*=2)	62.5%(*n*=5)	41.7% (*n*=5)
NON-SPECIFIC HEALTH ISSUE	11.1% (*n*=1)	12.5% (*n*=1)	8.3% (*n*=1)
TOTAL SENIOR CHARACTERS WITH HEALTH ISSUES	**9**	**8**	**12**

The use of assistive devices among characters age 60 and older was also assessed. Here, assistive devices referred to both mobility aids and prescription drugs. Very few seniors used assistive devices (3.2%, *n*=5 of 156) across all 72 series evaluated. Given that 25% of adults age 65 and above in the U.S. use a mobility aid,[24] and in one survey, 90% of seniors reported taking one or more prescription drugs in the past 30 days,[25] television appears to vastly underrepresent the health challenges and needs of real-world seniors.

Aside from health, death of senior characters was assessed. This was to determine if content featuring seniors focused on end of life. Few senior characters died across the samples of content. Just 5.8% (*n*=9) of senior characters perished in the 72 programs sampled—which is lower than the percentage of seniors who died in popular film (10.7%).[26] One potential explanation for the difference between film and television is TV's reliance on serial storytelling. When a TV character dies, it concludes his/her storyline and cuts off other potential avenues to explore. Practically, actors may have contracts that need to be honored across a season. Thus, films may be more likely to include senior death as a plot point or story feature than television.

There were no differences by sample in the prevalence of senior death. All of the senior characters who died were male, and 33.3% or 3 were from an underrepresented racial/ethnic group. Every senior death was due to violence. This included three individuals who were shot, two who were stabbed, and four others who were killed while fighting, attacked by a bear, hanged, or the victim of an explosion.

While Americans continue to cope with the costs of aging and health care, television represents seniors as predominantly healthy. Few seniors across the samples of content experienced any health problems or relied on assistive devices. While the leading causes of the death for U.S. seniors are heart disease, cancer, and chronic respiratory ailments,[27] on television the few seniors that die fell prey to violence. These depictions may contribute to seniors' safety concerns or perceptions of

the real world as a violent or dangerous place.[28] Also, this incongruity between fiction and reality suggests yet another way that entertainment masks the day to day concerns facing many seniors.

The nature of familial relationships was assessed for main senior characters. Here, the focus was on the relationships characters held with family members during the time they were 60 years of age or older. Thus, flashbacks to an earlier time were not included in this measure. Current spouses or long-term romantic partners were included as family members.[29] Once it was determined that characters had family relationships, these connections were coded as supportive, strained, supportive and strained, or can't tell (for cases where not enough information was provided).

#4
WHAT TYPE OF RELATIONSHIPS DO SENIOR CHARACTERS HAVE WITH THEIR FAMILIES?

Of the 70 main senior characters in the sample of 72 series, 44.3% (n=31) had family relationships and 51.4% (n=36) lacked these ties. This did not differ by sample. Females were more likely than males to have family relationships. Over half (55.6%, n=10 of 18) of senior females had families while 40.3% (n=21 of 52) of males did. Few of the seniors from underrepresented racial/ethnic groups (23.5%, n=4 of 17) had family relationships, versus half of White seniors (50.9%, n=27 of 53).

For the most part, familial relationships were supportive in nature. The majority (64.5%, n=20) of senior characters in the 72 series evaluated had supportive relationships with family, while 32.3% (n=10) were both supportive and strained, and 1 (3.2%) constituted a strained relationship. See Table 20. This did not differ by sample.

Senior characters' familial ties were further examined to determine whether the character was a grandparent. For this measure, the entire sample of senior characters (n=154) was evaluated across all 72 shows. The results are presented in Table 21. A total of 24 (15.6%) seniors were grandparents while 84.4% (n=130) were not. These trends are surprising, as 83% of Americans in the 65-plus age bracket claim status as a grandparent, while 52% of individuals age 50-64 are grandparents.[30]

Clearly, television does not mirror reality when it comes to showcasing this particular familial relationship.

TABLE 20
FAMILY RELATIONSHIPS OF SENIOR CHARACTERS BY SAMPLE TYPE

RELATIONSHIP TYPE	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	TOTAL SERIES
SUPPORTIVE	63.2% (n=12)	64% (n=16)	64.5% (n=20)
STRAINED	5.3% (n=1)	4% (n=1)	3.2% (n=1)
SUPPORTIVE AND STRAINED	31.6% (n=6)	32% (n=8)	32.3% (n=10)
TOTAL SENIORS WITH FAMILY	**19**	**25**	**31**

Examining the demographics of grandparents reveals that most of these relationships were held by White males. Of senior grandparents, 29.2% (n=7) were female, and 70.8% were male. One-third of senior grandparents (33.3%, n=8) were

from underrepresented racial/ethnic groups. More senior grandparents were female in the sample of content popular with 18-49-year-olds (33.3%, *n*=6) than in the sample of programming popular with viewers age 65 and older (20%, *n*=3).

TABLE 21

SENIOR CHARACTERS PORTRAYED AS GRANDPARENTS BY SAMPLE TYPE

	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	TOTAL SERIES
GRANDPARENT	16.7% (*n*=18)	13.2% (*n*=15)	15.6% (*n*=24)
NOT A GRANDPARENT	83.3% (*n*=90)	86.8% (*n*=99)	84.4% (*n*=130)
TOTAL SENIORS	**108**	**114**	**154**

The nature of grandparent relationships was assessed for main senior characters only. Of the 15 senior characters who were grandparents in the 72-show sample, 86.7% (*n*=13) had a discernible relationship with their grandchildren while 1 senior did not. For the final individual, the presence of a relationship could not be determined (8.3%, *n*=1). Two-thirds of these grandparent (66.7%, *n*=10) characters enjoyed supportive relationships with their grandchildren while the nature of the remaining one-third of relationships could not be ascertained. In terms of demographics, three of these senior characters with supportive relationships were female, and three were Black/African American.

Family relationships fill important roles in the life of seniors. Family members may provide support as caregivers or fulfill emotional needs related to connectedness. Research suggests that close relationships with family members may even be related to mortality.[31] Despite the value of close family bonds, in television, less than half of main senior characters were depicted with family relationships. For those that did have familial ties, however, these were predominantly supportive relationships. These findings suggest that television content may offer a window into positive family interactions involving seniors—even if they are few in number.

#5
WHAT IS THE MEDIA AND TECHNOLOGY USE PROFILE OF SENIOR CHARACTERS ON TELEVISION?

The media and technology use of seniors was evaluated. For each main senior character, a series of measures assessed whether time was spent with media. Media use included watching television or movies or reading books or newspapers. Additionally, two categories of media were assessed specifically: consuming news (televised or via newspaper) or watching television programming. Technology use was also examined. Characters who interacted with devices such as computers, cell phones, or tablets were considered to be using technology. Specific categories of interest included use of a cellphone or use of any type of computer.

Looking first at media consumption, 20% of main senior characters used any form of media while 80% did not. See Table 22. This differed by sample, as 13.3% (*n*=6) of seniors in the sample popular with 18-49 year old viewers used media while 19.6% (*n*=11) of seniors in the sample popular with viewers age 65 and above interfaced with media. There were no mean-

ingful differences by sex or race/ethnicity in media use. Females (16.7%, *n*=3 of 18) were less likely to utilize media than males (21.2%, *n*=11 of 52). This was also true for individuals from underrepresented racial/ethnic groups (17.6%, *n*=3 of 17) compared to White characters (20.8%, *n*=11 of 53).

TABLE 22

MAIN SENIOR CHARACTERS' MEDIA USE BY SAMPLE TYPE

	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	OVERALL SERIES
MEDIA USE OVERALL	13.3% (*n*=6)	19.6% (*n*=11)	20% (*n*=14)
NO MEDIA USE	86.7% (*n*=39)	80.4% (*n*=45)	80% (*n*=56)
TOTAL SENIORS	**45**	**56**	**70**

Note: Within sample, each column sums to 100%. Media use consisted of viewing television and/or reading. Only main senior characters were evaluated for this measure.

The type of media used by main senior characters was also analyzed. Half (*n*=7) of seniors using media read or watched news content, and 57.1% (*n*=8) watched television. As characters could both consume news and television, these percentages do not add to 100%.

Turning to technology engagement, nearly half (47.1%, *n*=33) of main senior characters across all 72 series used some form of technology. As shown in Table 23, seniors in the sample of content popular with viewers 65 and older (50%) were more likely to utilize technology than seniors in the series popular with viewers age 18-49 (35.6%). Differences emerged in technology use by sex and race/ethnicity. One-third of female seniors (33.3%, *n*=6 of 18) were shown with technology versus half of male seniors (51.9%, *n*=27 of 52). This was similar to the percentage of seniors from underrepresented racial/ethnic groups (35.3%, *n*=6 of 17) compared to White seniors (50.9%, *n*=27 of 53).

Of the senior characters that operated technology, 72.7% (*n*=24) did so with a cell phone. Over one-third (39.4%, *n*=13) worked with a computer or similar device during the program. These percentages do not add to 100%, as it was possible for seniors to use a cell phone and a computer.

TABLE 23

MAIN SENIOR CHARACTERS' TECHNOLOGY USE BY SAMPLE TYPE

	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	OVERALL SERIES
TECHNOLOGY USE OVERALL	35.6% (*n*=16)	50% (*n*=28)	47.1% (*n*=33)
NO TECHNOLOGY USE	64.4% (*n*=29)	50% (*n*=28)	52.9% (*n*=37)
TOTAL SENIORS	**45**	**56**	**70**

Note: Within sample, each column sums to 100%. Technology use included interacting with devices such as cell phones, computers, and/or tablets. Only main senior characters were evaluated for this measure.

Although half of senior characters used technology, television portrayals contrast sharply with seniors' actual engagement with entertainment or computing. Nielsen estimates that 82% of the Baby Boomer generation (age 53-70) have a computer

in the home, and that 86% of Boomer households have smartphones. These individuals spend considerable time with technology—roughly more than 4 hours per day across traditional computing, smartphones, or tablets.[32] This generation also spends over 6 and a half hours per day watching television,[33] and individuals 50 and older hold the largest share of news consumption.[34] Clearly, seniors are engaged with the world around them through technology and entertainment—but this was rarely captured in popular TV programs.

#6
WHAT TYPE OF LANGUAGE IS USED TO REFER TO SENIOR CHARACTERS ON TELEVISION?

The language used by and about senior characters was analyzed for the presence of ageism. Nonverbal or verbal references to aging or other negative traits related to the aging process were catalogued. Only the series with main senior characters were assessed for the presence of ageist comments.

A total of 39 series across all 72 evaluated featured main senior characters. Of those series, 41% (*n*=16 of 39) had one or more ageist comments (see Table 24). The presence of ageist comments varied by sample. Half of shows popular with viewers age 18-49 featured at least one ageist comment, while slightly more than one-third of shows popular with viewers age 65 and older did.

TABLE 24
AGEIST COMMENTS BY SAMPLE TYPE

	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	TOTAL SERIES
AGEIST COMMENT PRESENT	50% (*n*=13)	36.7% (*n*=11)	41% (*n*=16)
AGEIST COMMENT ABSENT	50% (*n*=13)	63.3% (*n*=19)	59% (*n*=23)
TOTAL SERIES EVALUATED	**26**	**30**	**39**

Note: Only series featuring main senior characters were evaluated for the presence of ageist comments. A total of 39 series of the 72 evaluated included main senior characters.

The genre of each series was incorporated into the analysis. Across all 16 series with an ageist comment, half of the programs were dramas and half were comedy or animated series (i.e., *The Simpsons*). Additionally, the origin of ageist comments was identified as either from the senior character or from another character. A full 68.8% (*n*=11) of series contained self-originated comments and 62.5% (*n*=10) of series contained comments that came from others. As more than one comment could occur per show, these do not sum to 100%.

Ageist comments were sorted into descriptive categories. The largest category was comments that reference age in a general or non-specific manner. Thirteen or 81.3% of series with ageist comments across the full sample fit into this category. Examples of comments in this category include: "Your parents are old. Anything unspeakable was finished by 9:30," "Things just sound creepier when you're old," "You like the color? It's called 'ancient ivory,' like you," or referring to a character as "Caveman."

The second category related to physical and mental well-being. Here, 50% (*n*=8) of series with ageist comments referenced senior characters' health or abilities. This category included comments such as: "I need to write down all these precious moments before I forget them," or "We're elderly, so, uh, you know, we'll just sit here and suffer."

A handful of other comments related to appearance and traditionality. Just (12.5%, *n*=2) of series with ageist comments mentioned these aspects of aging. One example of this was referring to a character as a "wrinkled old bastard." Finally, 3 series (18.8%) contained ageist comments related to death.

To understand the origins of ageist comments, the presence of a writer or showrunner who was 60 years of age or older on each program with a main senior character was catalogued. Shows *without* a 60-plus writer were more likely to feature an ageist comment than shows *with* senior writers. A full 81.2% (*n*=13) of series with ageist comments were written by a writer younger than 60, while 18.8% (*n*=3) of series with an ageist comment had a senior writer. The same held true for showrunners. Three-quarters (*n*=12) of series with ageist comments had showrunners younger than age 60. The remaining 25% of series with ageist comments had showrunners age 60 or older. ***This analysis suggests that ageist comments stem from the work of younger writers and showrunners.***

The findings mirror the percentage of ageist comments found across popular films from 2015 (52.6%) and Academy Award-nominated movies (42.9%). It is notable that series popular with a younger demographic contain a greater percentage of ageist comments than series popular with older viewers. The results also demonstrate that ageism was part of the fabric of dialogue when it comes to storytelling featuring senior characters. Invoking stereotypes about age could have negative consequences for viewers. Research has demonstrated that implicit ageism is related to adverse health and cognition outcomes for seniors.[35] If writers and audiences understood the potential costs of ageist comments for older viewers, this content might not seem so humorous.

The purpose of the present investigation was to assess the prevalence and portrayal of senior characters in two samples of television content. A total of 50 series popular with 18-49 year old viewers and 50 series popular with viewers 65 and older were examined. Four major findings emerged across the 72 TV programs evaluated.

Seniors are Snubbed in Popular Television Programs

Senior characters filled fewer than 10% of all speaking roles in popular television series. Meanwhile, seniors represent almost one-fifth of the U.S. population, and this constituency continues to increase.[36] Further, the demographic representation of fictional characters bears little resemblance to the diversity of real-world seniors. Less than 30% of senior characters and close to one-quarter of series regulars in popular television series were female, although over half of individuals age 60 and above in the U.S. are women. This disparity was more pronounced for women of color. Not one senior Asian female was depicted across the television shows studied, while Black/African American and Latina seniors appeared in only a handful of programs. Shows that included LGBT seniors were rare, with only one transgender senior female in all 72 shows.

The lack of seniors in popular television programming mirrors previous studies on top-grossing film and Academy Award-nominated content. The exclusion of individuals from this group across entertainment is more than a failure to depict a significant demographic. Seniors are also a powerful audience. Baby Boomers' household spending clocks in at roughly $60,000 per year, which is greater than Millennials (around $47,000). Even individuals in the Silent generation (born 1929 to 1945) spend over $40,000 per year.[37] Most importantly, these groups are still tuning in to television. Neglecting to include senior characters is a decision to alienate the senior audience, and one that may not be prudent for networks courting advertisers in an increasingly fragmented television landscape.

Senior Characters Spring from the Imaginations of Younger Creators

A limited number of individuals age 60 and older worked behind the camera across the 72 series evaluated—just 12.6% of all credited directors, writers, and showrunners. Moreover, of the individuals age 60 or above working behind the scenes, females or individuals from underrepresented racial/ethnic groups appeared infrequently. Only 1 senior female writer and 1 senior female showrunner worked across the sample. None of the 60-plus writers or showrunners were from underrepresented racial/ethnic groups.

The only significant association between the age of individuals working behind the camera and the presence of seniors on screen occurred between series regulars and senior showrunners. However, the lack of older writers—particularly women and those from underrepresented groups—suggests that creative individuals working behind the scenes may be important to ensure that the stories of older characters are told. The lack of inclusion behind the scenes in Hollywood is well-documented by our other studies.[38] It is clear that gender and race/ethnicity are not the only demographics that restrict opportunity—age may be another factor that limits the careers of content creators.

Seniors are Still Shown in the Workforce in Popular Television Programs

While most individuals 60 and older in the U.S. have left the workforce, popular TV programs paint a portrait of an active, engaged and working senior contingent. Nearly three-quarters of senior characters were shown with a job, and 21% of employed seniors were in high clout positions. Female seniors, however, were less likely to be shown working, and less likely than their male counterparts to have prestigious occupations. One bright spot, however, was the prevalence of employed

senior characters from underrepresented racial/ethnic groups and the depiction of women of color in high-status jobs.

The portrayal of seniors across other qualitative measures reflects the focus on seniors' capability for work. The majority of seniors were healthy and few died—none of whom perished due to a health issue. Additionally, nearly half of main senior characters were shown using technology. For younger viewers—especially those who expect to work longer before retirement—television may demonstrate the value of the senior workforce. For older viewers, these portrayals may reinforce that seniors can still make important contributions to society no matter their age.

Seniors Confront Ageist Comments in Popular Television Programs

The language used to refer to senior characters in television continues to reflect stereotypes about aging. Forty-one percent of shows featuring a main senior character contained at least one ageist comment. This is on par with previous findings across cinematic storytelling,[39] and reflects a reliance on outdated tropes by writers and storytellers. In fact, the individuals peppering shows with ageist commentary tended not to be seniors—suggesting that stereotypes or beliefs held by younger industry members may perpetuate misrepresentation or outdated views of older characters. While ageism may seem funny, it can have potential negative effects. These include performance on memory tasks, handwriting, physiological indicators, and even seniors' will to live.[40] Reinforcing negative conceptions about aging among younger viewers may also strengthen stereotypes and result in stronger implicit associations about aging.

While the findings in this investigation provide important insights into the depiction of seniors in television, a few limitations must be noted. First, only one episode of each series was evaluated. All speaking characters and series regulars were examined, which provided an understanding of the overall diversity across a show as well as the individuals with a recurring role who may be more familiar to audiences. However, this approach may mean that minor parts featuring seniors in later episodes were missed. This extends to behind the camera data. Seniors may be employed as writers or directors on other episodes throughout the season. Future studies may wish to extend these findings by looking at employment on screen and behind the scenes across multiple episodes.

Second, our measures of popularity may exclude other pertinent portrayals of seniors. Importantly, streaming content was not analyzed in this study. As many adults view content on platforms such as Netflix or Amazon, additional programs not included in this evaluation may or may not include more diverse senior representation. Additionally, less popular programs may feature more seniors, or they may be less likely to include individuals from this age group. Researchers may wish to review series beyond the 72 included in this report to gain a fuller picture of the television landscape.

Finally, ageist comments were only assessed for main senior characters. It is possible that looking at the dialogue surrounding minor senior characters or all characters in general could reveal different findings. In particular, it would be informative to examine portrayals of middle aged characters to understand how views of aging are conveyed through dialogue between slightly younger individuals.

Overall, this study extends our understanding of how seniors were depicted in popular media content. It is clear that television was similar to cinematic content in its exclusion of older individuals—both in front of and behind the camera. As a sizeable and significant portion of the population, seniors have a wealth of stories to share and perspectives to present. Incorporating characters and storytellers in their later years will give viewers of all ages the opportunity to watch more vibrant, diverse, and compelling stories on screens both large and small.

ACKNOWLEDGMENTS

MDSC INITIATIVE STUDENT RESEARCH TEAM

FOOTNOTES

1. U.S. Census Bureau (n.d.). Age Groups and Sex: 2011-2015 American Community Survey 5-Year Estimates. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S0101&prodType=table

2. The Macarthur Foundation Research Network on an Aging Society (2009). Facts and Fictions about an Aging America. *Contexts*, *8*(4), 16-21.

3. The Nielsen Company (2017). *The Nielsen Total Audience Report Q1 2017*.

4. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*. Report prepared for Humana. Media, Diversity, & Social Change Initiative. Los Angeles, CA: USC Annenberg School of Communication and Journalism.

5. Smith, S.L., Choueiti, M., & Pieper, K., (2017). *Over Sixty, Underestimated: A Look at Aging on the "Silver" in Best Picture Nominated Films*. Report prepared for Humana. Media, Diversity, & Social Change Initiative. Los Angeles, CA: USC Annenberg School of Communication and Journalism.

6. The sample was determined using Nielsen data. PHD Media (a Humana media partner) provided a list of television series and other content (i.e., sports, special events) airing between June 1, 2016 and May 31, 2017. We specified that the list should only contain series airing during Prime Time (8-11pm M-Sa; 7-11pm Su) across all networks including broadcast and cable, ad or not ad supported. Hispanic programming and any series with episode runtimes under 5 minutes were excluded. From this list, we used Genre categorizations and the Audience Average Rating %s for Adults 18-49 and Adults 65+ (Live+7) to determine the final sample. We sorted the list by Audience Average Rating % from high to low within the respective demographic (i.e., 18-49; 65+). Then, we systematically researched each series/show beginning with the highest rated series. Information gathered was used to categorize each series as either "Scripted Fiction" or not (e.g., reality, news, game show). If the show fell into the category of scripted fiction, we selected it as part of the sample. If it did not meet this criterion, it was not included. We did this until we had 50 different scripted fiction television series for the 18-49 sample and for the 65+ sample. Sample rank was determined by examining where the series fell on the list of included series based on Nielsen rating.

7. The first episode of the series airing within the time frame sampled was analyzed, with three exceptions (i.e., *Game of Thrones*, *Fear the Walking Dead*, *Person of Interest*). These series aired their first episode prior to the start of the sampling time frame. For these series, the first episode airing within the time frame (June 1, 2016 to May 31, 2017) was analyzed. For qualitative analyses of leading and supporting senior characters, either the second episode or the episode following the one sampled was included.

8. The primary unit of analysis in this investigation is the speaking character. Speaking characters are independent living beings depicted on screen who utter one or more discernible words or are named. The definition above excludes groups of characters who speak simultaneously. Additionally, characters who speak sequentially but who are identical and thus indiscernible from each other are combined into a single line of data. In this investigation, there were no groups of sequentially speaking characters. The nature of storytelling also occasionally results in demographic changes of characters. This occurs when a character alters in type, age group, gender, and/or race/ethnicity. A demographic change results in a new unit of analysis. In the full sample, 27 demographic changes occurred, with 55.6% of characters experiencing demographic changes male and 44.4% female. Demographic changes were included in all analyses. Overall, removing demographic changes results in minor differences to percentages. For example, 60.4% of characters are male and 39.6% of characters are female when demographic changes are excluded. Of the characters with demographic changes, none were 60 years of age or above.

For each speaking or named character, a series of variables were evaluated across demographics, domesticity, and sexualization. Only those measures which are reported will be included here, and a full review of all measures can be found in other MDSC Initiative reports (see: http://annenberg.usc.edu/mdsci). Demographic measures included type (i.e., human, animal, supernatural creature, anthropomorphized supernatural creature, anthropomorphized animal), biological sex (i.e., male, female), race/ethnicity (i.e., White, Hispanic/Latino, Black, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Asian, Middle Eastern, Other), and age grouping (i.e., 0-5 years, 6-12 years, 13-20 years, 21-39 years, 40-64 years, 65 years and older).

Domestic roles included parental status (i.e., non parent, single parent, co parent, parent relational status unknown). This measure could only be evaluated when sufficient information was provided across the plot. Sample sizes for this measure are smaller, as rendering a judgment on this variable may be difficult. Cautious interpretation of these results is recommended.

Across the above variables, two coding levels (i.e., can't tell, not applicable) were also employed. The use of "can't tell" occurred when it was impossible to render a judgment or determine which variable level to assign. As an example, determining parental status for a character who appears briefly may not be possible if no information is provided. "Not applicable" reflects measures that do not apply to a character. For instance, animals cannot be assessed for race/ethnicity and thus this measure would be coded as not applicable.

Apparent sexuality was also evaluated. This variable assessed a character's enduring sexual and/or romantic attraction to men, women, or both. When explicit information was not available, two contextual cues were required to code a character as lesbian, gay, or bisexual (LGB). This variable was later collapsed to two categories: LGB vs. not LGB. Transgender characters are those who identify with a gender opposite their biological sex. Here, cross-dressing characters or those performing in drag are not considered transgender without additional contextual information. Notable transgender individuals who appear as themselves (i.e.,

Caitlyn Jenner) are coded as transgender automatically.

Finally, role (i.e., leading, supporting, inconsequential) was coded for each character. Although research assistants made these judgments after viewing the program, we also obtained information on series regulars using listings for each series in Variety Insight. Series regular status was coded as yes or no for each character. For series regulars who did not appear in the first episode, data was obtained from online sources. This included: the actor's age (at episode release date), sex, race/ethnicity, and the character's LGBT status.

The program level was the second unit of analysis. Shows were coded for genre (i.e., drama yes/no, comedy yes/no; animation yes/no). This distinction was made using information from PHD Media.

Undergraduate research assistants were trained on coding procedures by one of the study authors during a six week course in the Spring of 2017. After completing the course and a series of coding diagnostics, research assistants evaluated the programs in the sample for demographics and domesticity variables. Three individuals independently coded each television show. For each program, unitizing and variable reliability is computed. Discussions with MDSC senior leadership resolved any coding discrepancies.

Unitizing reliability captured the number of lines of data agreed upon by at least 2 of 3 coders. When reliability is equal to 100%, this means that 2 of 3 coders identified every speaking character. Unitizing agreement is reported in quartiles: Q1 100% (programs 1-18); Q2 100%-92.85% (programs 19-36); Q3 92.68%-87.50% (programs 37-54); Q4 87.10%-71.19% (programs 55 to 72). No programs had reliability below 70%.

Variable reliability was calculated using the Potter & Levine-Donnerstein (1999) formula for multiple coders. For each measure, the sample-wide median is reported, followed by mean and range (low to high): *type* 1.0 (*M*=.99, *range*=.64-1.0); *age* 1.0 (*M*=.92, *range*=.65-1.0); *sex* 1.0 (*M*=1.0, *range*=1.0); *race/ethnicity* 1.0 (*M*=1.0, *range*=1.0); *parental status* 1.0 (*M*=.98, *range*=.64-1.0); *relational standing* 1.0 (*M*=.98, *range*=.65-1.0); *role* 1.0 (*M*=.95, *range*=.63-1.0); *apparent sexuality* 1.0 (*M*=1.0, *range*=1.0); and *transgender* 1.0 (*M*=1.0, *range*=1.0).

9. Following collection of demographic and domesticity data and construction of a final data file for each series, the presence of a 60-plus character was determined and an initial collection of qualitative data occurred. For each character judged to be age 40 or older, the birthday for the actor who played that character was found using online sources (i.e., IMDbPro.com, StudioSystem, VarietyInsight, other online sources). The actor's date of birth was compared to the release date of the episode. Actors who were 60 years of age or older at the date of release were coded as "60 plus" in the analysis. The only exception to this was for characters whose age was clearly stated as under or over 60 within the plot of the show. For characters or actors whose age was not able to be determined, information in the plot and photographs were used to render a judgment as to whether a character was "60 plus" or not.

After a determination was made, each character coded as 60 plus was examined for a series of qualitative factors. Research assistants determined (yes/no) whether the senior character had a job, health issues, utilized an assistive device, died, and whether the seniors' home was depicted. For each of these variables, RAs also provided descriptive information when available. Finally, a physical description of each character was recorded. Three coders assessed every episode to determine characters' age and information for each of the qualitative variables. Following this, answers to each question were discussed with a senior member of the MDSC Initiative team and a final judgment was rendered.

10. For leading, supporting, and series regular senior characters, an additional set of qualitative variables were evaluated. Two coders assessed each leading, supporting or series regular character. For this analysis, two episodes were viewed. This was done to supplement information provided in the first episode. Five series regular senior characters did not appear in the first episode, but three did appear in the second episode evaluated. The remaining two series regular seniors were not included in analyses.

Variables evaluated in this qualitative analysis included relationships among colleagues and expertise related to occupation, family relationships, media and technology use, and ageist comments. Coders determined whether these variables were present or absent, and the nature of relationships. They were instructed to take detailed notes and provide descriptions regarding each variable. After both episodes were evaluated by the two coders, judgments were compared and discussed with a member of the senior leadership team. A final answer was determined through this discussion process.

11. U.S. Census Bureau (n.d.). Age Groups and Sex: 2011-2015 American Community Survey 5-Year Estimates. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S0101&prodType=table

12. U.S. Census Bureau (n.d.). Age Groups and Sex: 2011-2015 American Community Survey 5-Year Estimates. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S0101&prodType=table

13. The definition of a series regular can be found in Smith et al. (2016) *Inclusion or Invisibility* (see Footnote 9) Available: http://annenberg.usc.edu/sites/default/files/2017/04/07/MDSCI_CARD_Report_FINAL_Exec_Summary.pdf. Variety Insight was used to determine which characters were series regulars. For animated series, when series regular characters were not listed, we identified individuals listed as voice talent. Characters voiced by the individuals identified as voice talent and appearing in 50% or more of a season's episodes were coded as series regulars.

CHARACTER RACE/ETHNICITY BY AGE: 18-49 SAMPLE

RACIAL/ETHNIC GROUP	0-20	21-39	40-59	60+	TOTAL
WHITE	68%	57%	66.4%	69.2%	62.6%
BLACK/AFRICAN AMERICAN	14.3%	18.1%	20.8%	16.8%	18.3%
HISPANIC/LATINO	4.8%	9.7%	6%	8.4%	7.8%
ASIAN	1.4%	7%	2.6%	0.9%	4.3%
OTHER	11.6%	8.2%	4.3%	4.7%	7.1%

CHARACTER RACE/ETHNICITY BY AGE: 65+ SAMPLE

RACIAL/ETHNIC GROUP	0-20	21-39	40-59	60+	TOTAL
WHITE	67.4%	53.6%	65.7%	70.5%	60.2%
BLACK/AFRICAN AMERICAN	14%	19.6%	17.3%	14.3%	17.9%
HISPANIC/LATINO	7%	10.4%	8.8%	7.1%	9.3%
ASIAN	1.2%	7.1%	3.6%	0.9%	4.9%
OTHER	10.5%	9.3%	4.7%	7.1%	7.7%

14. U.S. Census Bureau (2016). Quick Facts. Retrieved July 17, 2017 from https://www.census.gov/quickfacts/. Data on the distribution of race/ethnicity across each sample is presented above.

15. Sometimes, a characters' LGBT status was clear based on episode coded. However, information could be embedded in other episodes—including those in prior seasons. To accurately code series regulars' LGBT status, research assistants used online sources to code each individual character as lesbian, gay, bisexual, transgender or not LGBT.

16. Gates, G.J. (2011). How many people are Lesbian, Gay, Bisexual, and Transgender? Report by The Williams Institute. Retrieved online: https://williamsinstitute.law.ucla.edu/wp-content/uploads/Gates-How-Many-People-LGBT-Apr-2011.pdf. Smith, S.L., Choueiti, M., & Pieper, K. (2017). Inequality in 900 Popular Films: Examining Portrayals of Gender, Race/Ethnicity, LGBT, and Disability from 2007-2016. Media, Diversity, & Social Change Initiative. Los Angeles, CA: Annenberg School for Communication. http://annenberg.usc.edu/sites/default/files/Dr_Stacy_L_Smith-Inequality_in_900_Popular_Films.pdf

17. U.S. Census Bureau (n.d.). Age Groups and Sex: 2011-2015 American Community Survey 5-Year Estimates. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_15_5YR_S0101&prodType=table

18. For each episode across both samples of television, the directing and writing credits were collected using IMDbPro. As noted in our *Inclusion or Invisibility* study (see Footnote 17), sources from the Writers Guild of America West offered insight on writing credits for episodic television. These included the "Writing for Episodic TV" booklet (http://www.wga.org/subpage_writersresources.aspx?id=156), screen credits manual (http://www.wga.org/subpage_writersresources.aspx?id=167), and conversations with a credits representative (personal communication, 1/26/2015). This guidance revealed that only individuals designated as "Writer/Written by," "Story/Story by," and "Teleplay/Teleplay by" should be credited as the writers for the episode." As such, we included individuals credited for writing the story "Writer/Written by" "Story/Story by" "Teleplay/Teleplay by" and "Written for Television by." If an individual was listed in IMDbPro but did not receive one of the listed credits, they were not included. We also excluded staff writers, story editors, source material, creators, additional story material, and story developers. Individuals who were listed as "uncredited" were also not included. Showrunners were determined using the Variety Insight and Studio System databases as well as popular press. If showrunners joined or exited at some point during the season, they were also included in our analysis. In sum, 296 directors, writers, and showrunners were researched for their sex, age, and race/ethnicity using the above databases and online generally (e.g. personal websites, interviews, biographies). All information used for analyses was tracked throughout the process and checked for quality/accuracy once data collection was complete.

We used data collected for our *Inclusion in the Director's Chair?* 2017 report on top grossing directors as well as the Writers & Directors Guild databases to

confirm 36 individuals' race/ethnicity. An additional 23 were confirmed by the individual's agent or manager. After exhausting all methods, we were unable to confirm the race/ethnicity of five directors, seven writers, and three showrunners. We inferred 13 of these 15 individuals as White/Caucasian. The remaining male director and female writer are excluded from analyses related to race/ethnicity.

To determine age for directors and writers, we summed the total years between their date of birth and the release date of the episode. For showrunners we used the season premiere date of the season we analyzed. We also used high school and college graduation years to determine individuals' year of birth (minus 18 and 22 years respectively). In each instance where only an age and birth year were found, we set the birth month and day to January 1st. Databases that aggregate public information on individuals were also used to determine current age and thus year of birth.

19. The relationship between *60-plus showrunner* (no, yes) and *60-plus series regular* (no, yes) was significant, $X^2(1, 612)=7.185$, $p<.05$, phi=.11.

20. Series regulars who were age 60 or older are included in qualitative analyses for all senior characters. There were five shows in which a 60-plus series regular did not appear or speak in the first episode: *The Walking Dead*, *American Horror Story*, *Fear the Walking Dead*, *Major Crimes*, and *Man With a Plan*. For these series, the second episode was examined to code qualitative measures. Two series regulars did not appear in the second episode of their respective series (i.e., *The Walking Dead*, *Fear the Walking Dead*). These individuals are not included in analyses.

21. Bureau of Labor Statistics (2016). Household Data Annual Averages. *Table 3. Employment status of the civilian noninstitutional population by age, sex, and race.* Retrieved from https://www.bls.gov/cps/cpsaat03.pdf.

22. National Prevention Council. Healthy Aging in Action. Washington, D.C.: U.S. Department of Health and Human Services, Office of the Surgeon General; 2016.

23. National Prevention Council.

24. Gell, N.M., Wallace, R.B., Lacroix, A.Z., Mroz, T.M., & Patel, K.V. (2015). Mobility device use in older adults and incidence of falls and worry about falling: Findings from the 2011–2012 National Health and Aging Trends Study. *Journal of the American Geriatrics Society, 63*(5), 853-859.
25. Kantor, E.D., Rehm, C.D., Haas, J.S., Chan, A.T., & Giovannucci, E.L. (2015). Trends in prescription drug use among adults in the United States from 1999-2012. *Jama, 314*(17), 1818-1830.

26. Smith et al. (2016).

27. National Center for Health Statistics (2014). *Table 20. Leading causes of death and numbers of deaths, by age: United States, 1980 and 2014.* Centers for Disease Control and Prevention. Available: http://www.cdc.gov/nchs/hus/contents2015.htm#020

28. For review of cultivation processes linking television viewing to beliefs about safety and victimization, see Gerbner, G., Gross, L., Morgan, M., Signorielli, N., & Shanahan, J. (2002). *Growing up with television: Cultivation processes*. In J. Bryant & D. Zillmann (Eds.) Media Effects: Advances in Theory and Research (2nd Edition). Mahwah, NJ: Lawrence Erlbaum Associates.

29. Excluding current spouses or partners minimally altered the prevalence of family relationships among senior characters. Of the 70 main senior characters in the sample of 72 series, 41.4% (*n*=29) had family relationships and 58.6% (*n*=41) lacked these ties. This did not differ by sample. See the table below for a breakdown of the nature of these relationships by sample.

30. Krogstad, J.M. (2015, September 13). *5 facts about American grandparents*. Pew Research Center. Retrieved from http://www.pewresearch.org/fact-tank/2015/09/13/5-facts-about-american-grandparents/

FAMILY RELATIONSHIPS OF SENIOR CHARACTERS BY SAMPLE TYPE

RELATIONSHIP TYPE	POPULAR SHOWS 18-49 YR OLDS	POPULAR SHOWS 65 YRS AND ABOVE	TOTAL SERIES
SUPPORTIVE	63.2% (*n*=12)	69.6% (*n*=16)	69% (*n*=20)
STRAINED	5.3% (*n*=1)	4.3% (*n*=1)	3.4% (*n*=1)
SUPPORTIVE AND STRAINED	26.3% (*n*=5)	21.7% (*n*=5)	24.1% (*n*=7)
CAN'T TELL	5.3% (*n*=1)	4.3% (*n*=1)	3.4% (*n*=1)
TOTAL SENIORS WITH FAMILY	**19**	**23**	**29**

31. American Sociological Association (2016, August 21). *Relationships With Family Members, But Not Friends, Decrease Likelihood Of Death*. Retrieved from: http://www.asanet.org/press-center/press-releases/relationships-family-members-not-friends-decrease-likelihood-death

32. The Nielsen Company (2017). *The Nielsen Total Audience Report Q1 2017*.

33. The Nielsen Company (2017). *The Nielsen Total Audience Report Q1 2017*.

34. The Nielsen Company (2017). *The Nielsen Total Audience Report Q4 2016*.

35. For review, see Levy, B.R. & Banaji, M.R. (2002). Implicit ageism. In T.D. Nelson (Ed.) *Ageism: Stereotyping and Prejudice against Older Persons*. Cambridge, MA: The MIT Press.

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37. Henderson, S. (2016, September 3). Spending Habits by Generation. U.S. Department of Labor Blog. Available: https://blog.dol.gov/2016/11/03/spending-habits-by-generation

38. Smith, S.L., Pieper, K., & Choueiti, M. (2017). Inclusion in the Director's Chair? Gender, Race, & Age of Film Directors Across 1,000 Films from 2007-2016. Media, Diversity, & Social Change Initiative. Los Angeles, CA: Annenberg School for Communication. http://annenberg.usc.edu/sites/default/files/2017/04/06/MDSCI_Inclusion%20_in_the_Directors_Chair.pdf Also, see other Media, Diversity, & Social Change Initiative reports. Available: http://annenberg.usc.edu/research/mdsci

39. Smith et al. (2016). Smith et al. (2017).

40. For review, see Levy, B. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *Journal of Gerontology: Psychological Sciences, 58B*(4) p. 203-211.

APPENDIX A

SAMPLE OF TELEVISION SERIES POPULAR WITH PEOPLE 18-49 YEARS OLD

RANK	NETWORK	TITLE	SEASON	RANK	NETWORK	TITLE	SEASON
1	AMC	The Walking Dead	7	26	ABC	The Middle	8
2	HBO	Game of Thrones	6	27	NBC	Chicago Med	2
3	CBS	The Big Bang Theory	10	28	FOX	Star	1
4	NBC	This Is Us	1	29	NBC	Timeless	1
5	FOX	Empire	3	30	CBS	Scorpion	3
6	ABC	Modern Family	8	31	NBC	The Blacklist	4
7	ABC	Grey's Anatomy	13	32	CBS	Mom	4
8	FX	American Horror Story	6	33	CBS	Life in Pieces	2
9	ABC	Designated Survivor	1	34	FOX	Family Guy	15
10	AMC	Fear the Walking Dead	2	35	NBC	The Good Place	1
11	ABC	How To Get Away With Murder	3	36	CBS	The Great Indoors	1
12	ABC	Scandal	6	37	CBS	NCIS: New Orleans	3
13	CBS	NCIS	14	38	CBS	Blue Bloods	7
14	NBC	Chicago Fire	5	39	CBS	2 Broke Girls	6
15	ABC	The Goldbergs	4	40	CW	The Flash	3
16	ABC	Black-ish	3	41	CBS	NCIS: Los Angeles	8
17	CBS	Criminal Minds	12	42	CBS	Hawaii Five-0	7
18	FOX	Lethal Weapon	1	43	FOX	Gotham	3
19	NBC	Law & Order: SVU	18	44	COM	South Park	20
20	NBC	Chicago P.D.	4	45	FOX	The Mick	1
21	CBS	Bull	1	46	FOX	Lucifer	2
22	CBS	Kevin Can Wait	1	47	NBC	Blindspot	2
23	FOX	The Simpsons	28	48	NBC	Superstore	2
24	ABC	Speechless	1	49	ABC	Last Man Standing	6
25	ABC	American Housewife	1	50	CBS	Code Black	2

APPENDIX B

SAMPLE OF TELEVISION SERIES POPULAR WITH PEOPLE 65 YEARS OLD AND ABOVE

RANK	NETWORK	TITLE	SEASON	RANK	NETWORK	TITLE	SEASON
1	CBS	NCIS	14	26	ABC	Grey's Anatomy	13
2	CBS	Bull	1	27	CBS	Mom	4
3	CBS	Blue Bloods	7	28	CBS	Criminal Minds: Beyond Borders	2
4	CBS	NCIS: New Orleans	3	29	ABC	Last Man Standing	6
5	CBS	NCIS: Los Angeles	8	30	TNT	Major Crimes	5
6	CBS	Madam Secretary	3	31	CBS	Kevin Can Wait	1
7	CBS	Hawaii Five-o	7	32	NBC	Lethal Weapon	1
8	CBS	The Big Bang Theory	10	33	NBC	Shades of Blue	2
9	CBS	MacGyver	1	34	NBC	The Night Shift	3
10	ABC	Designated Survivor	1	35	ABC	Scandal	6
11	CBS	Scorpion	3	36	NBC	Taken	1
12	CBS	Criminal Minds	12	37	CBS	The Great Indoors	1
13	NBS	Chicago Med	2	38	NBC	Blacklist: Redemption	1
14	CBS	Person of Interest	5	39	NBC	Blindspot	2
15	NBC	Chicago P.D.	4	40	CBS	Zoo	2
16	NBC	Chicago Med	5	41	CBS	Superior Donuts	1
17	CBS	Code Black	2	42	CBS	Man With a Plan	1
18	NBC	This Is Us	1	43	ABC	Conviction	1
19	NBC	Chicago Justice	1	44	CBS	Ransom	1
20	NBC	The Blacklist	4	45	CBS	Life in Pieces	2
21	CBS	Elementary	5	46	ABC	Downward Dog	1
22	CBS	Doubt	1	47	NBC	Timeless	1
23	CBS	Pure Genius	1	48	ABC	Notorious	1
24	TNT	Rizzoli & Isles	7	49	CBS	Training Day	1
25	NBC	Law & Order: SVU	18	50	ABC	How to Get Away With Murder	3