Over Sixty, Underestimated:
A Look at Aging on the "Silver" Screen in Best Picture Nominated Films

Stacy L. Smith, PhD, Marc Choueiti, & Katherine Pieper, PhD

with assistance from

Artur Tofan, Anne-Marie DePauw, Angel Choi, Ariana Case & Kevin Yao

Media, Diversity, & Social Change Initiative

February 2017

FOREWORD

In 2016, we embarked on a joint study with Dr. Stacy L. Smith and her team at the Media, Diversity & Social Change Initiative at USC's Annenberg School to examine society's views of aging in America through the lens of film, and how those views impact health outcomes for aging Americans. At the time, I wasn't sure what to expect from our joint research.

As a physician, and a Baby Boomer, the health of the senior population is close to my heart. So when the results from the research came through, I was taken aback. In my mind, the results definitively show that senior characters are under and misrepresented in movies. This information, coupled with findings from a Humana survey add to the growing body of evidence that suggests ageism is a social determinant of health and may negatively impact health outcomes for aging Americans.

As the partnership between USC and Humana extended into 2017, it was with both hope and curiosity that I looked forward to the results of this latest study on best picture-nominated films. I had hoped to see that perhaps, in this critically acclaimed body of work, more care would be taken to realistically represent aging Americans in film.

As you read this report, we hope you'll begin to question not just film portrayals, but how these inaccuracies and demeaning remarks are reflections of social norms. There is still more work that needs to be done in order to make aging Americans feel valued in our society. We believe that popular culture has the ability to transform social views of aging and fuel a sense of optimism.

Sincerely,
Dr. Yolangel Hernandez Suarez
Vice President and Chief Medical Officer of Care Delivery
Humana

INTRODUCTION

The purpose of this investigation was to assess the prevalence and portrayal of senior characters in Academy Award-nominated Best Picture films. A total of 25 films nominated for Best Picture and released in 2014 (*n*=8), 2015 (*n*=8), and 2016 (*n*=9) were included in this analysis. Every speaking or named character in each movie was examined across several indicators. A further set of attributes were qualitatively assessed for all senior characters (individuals age 60 and above) and for leading and supporting senior characters.

KEY FINDINGS

Only 148 (11.8%) of the 1,256 speaking characters in 25 Best Picture-nominated movies were 60 years of age or older. This is 6.7% below the percentage of seniors in the U.S., according to the U.S. Census.

Of the 148 senior characters, 77.7% were men and 22.3% were women. This is a gender ratio of 3.5 males to every 1 female.

The distribution of the 33 female senior characters varied by year, with 13 (39.4%) in 2014 movies, 16 (48.5%) in 2015 movies, but only 4 (12.1%) in 2016 movies. ***Clearly, 2016 is a problematic year for depictions of senior women on screen.***

Turning to race/ethnicity, a full 89.9% of the senior characters were white, 6.1% Black, 2% Asian, and 2% were from "other" or mixed racial/ethnic backgrounds (1 American Indian/Alaskan Native, 1 Middle Eastern, 1 mixed races/ethnicities). Overall, only 10.1% of senior characters were from an underrepresented racial/ethnic group. Notably, not one senior character was coded as Hispanic/ Latino.

Only 4 diverse senior women were coded across the 25 movies. All four of these characters were Black women. Thus, senior women are only Black or white across more than two dozen movies evaluated.

Not one character 60 years of age or older was coded as Lesbian, Gay, Bisexual or Transgender.

Of the 1,108 non-senior characters, 69.3% (*n*=768) were male and 30.7% (*n*=340) were female. This overall percentage of non-senior female characters is 8.4% higher than the percentage of female seniors.

2014 had the lowest percentage of female characters under age 60, while 2016 had the highest. Senior female characters faced a decrease in 2016, as only 9.3% of senior characters in Academy Award-nominated films were female in 2016.

Characters from underrepresented racial/ethnic groups represent 23.6% (*n*=261) of all non-senior characters in Best Picture-nominated films. This is 13.5% higher than the percentage of underrepresented seniors in the same movies.

2015 (12.3%) showcased the lowest percentage of non-senior underrepresented characters. 2016 (38.2%) was the strongest year for non-senior underrepresented performers, while 2014 (21.6%) held a middle position. In 2016, the proportion of non-senior underrepresented characters matched the percentage of underrepresented individuals in the U.S. population, 38.4%.

Less than 1% of non-senior characters were Lesbian, Gay, or Bisexual across the sample. Seven characters were gay and three were bisexual. No Transgender characters appeared across the three years of Best Picture nominated movies.

Of all the leads and co leads driving the action (*n*=29), only one (3.4%) was a character 60 years of age or older. Among ensemble casts, only 1 of the 6 (16.7%) leading characters was a senior. Ironically, Michael Keaton filled both these roles in *Birdman* and *Spotlight*. **Thus, the only two senior leads across the 25 films were played by the same white, male actor.**

Over two-thirds (68.2%) of senior characters in Academy Award-nominated films were depicted with a job. This differed by gender, as 42.4% of senior females held an occupation and 75.7% of senior males worked.

Examining the clout of employed senior characters revealed that 34% of senior characters were depicted with a powerful job. These prestigious occupations are overwhelmingly held by senior male characters. **Only one senior female character was depicted in a high clout position, which is a gender ratio of 33 to 1.**

The race/ethnicity of employed senior characters in clout-based positions was also evaluated. **Only 4 seniors (11.8%) from underrepresented racial/ethnic groups (2 Black, 1 Asian, 1 Other) held powerful occupations across the sample. Not one portrayal involved a Hispanic/Latino senior.** Senior characters—in particular females and individuals from underrepresented racial/ethnic groups—rarely have the opportunity to wield occupational power on screen.

Only 6.1% of seniors faced a health issue. The majority of these health problems were shouldered by males (88.9%) rather than females (11.1%). White characters (88.9%) were most likely to face ill health, as only 1 Black character experienced a health-related issue.

Only 8.8% of individuals age 60 and above perished across the films studied. **Of these 13 individuals, the vast majority (84.6%) lost their lives as a function of violence (i.e., shot, poisoned)**. The remaining two individuals (15.4%) died of non-specific or natural causes. This stands in stark contrast to the major causes of death of seniors in the U.S. population—heart disease, cancer, or other respiratory ailments.

Six (42.9%) of the 14 films with a leading or supporting senior character featured an ageist comment. These comments were sorted into several categories. A full 35.7% of the films with prominent senior characters included general derogatory comments about aging. Comments about health and movement appeared in 14.3% of the films with leading or supporting senior characters. Two films (14.3%) contained derogatory references to cognition or senses. One film (7.1%) included a death-related comment and one film (7.1%) an appearance-related reference.

For the past several years, the outcry over the lack of diversity at the Academy Awards has created a volume of news coverage. From #OscarsSoWhite and #OscarsSoMale to outrage over derogatory comments about Asians made during the televised awards ceremony, the focus on Hollywood's diversity problem has been unrelenting. Yet one group has not been at the center of public anger and advocacy: senior citizens.

Individuals age 60 and older represent 18.5% of the U.S. population[1] and 14% of film ticket buyers in the U.S.[2] They are also a stalwart of Hollywood's most prestigious club: the Academy of Motion Picture Arts and Sciences (AMPAS). Based on a 2012 study by the *Los Angeles Times*, the median age of AMPAS voters was 62 years.[3] While the Academy has recently focused on diversifying its ranks, the oldest member of the 2016 inductee class was 91 years of age.[4] Despite their presence in the population, the audience, and among film professionals, only 11% of all speaking characters in the 100 top films of 2015 were age 60 or older.[5]

Given the lack of seniors in popular cinematic storytelling, we were curious if this trend extends to critically acclaimed movies. Therefore, the purpose of this investigation was to assess the prevalence and portrayal of senior characters in Academy Award-nominated Best Picture films. A total of 25 films nominated for Best Picture and released in 2014 (*n*=8), 2015 (*n*=8), and 2016 (*n*=9) were included in this analysis. A list of films is included in Table 1. Every speaking or named character in each movie was examined across several indicators (e.g., gender, race/ethnicity, age, LGBT status).[6] For senior characters (age 60 and above), a further set of attributes were measured related to occupation and health.[7] A qualitative analysis of all leading and supporting senior characters was also performed.[8] Below, six major study findings are presented across the quantitative and qualitative indicators.

Table 1
***Academy Award-Nominated Best Picture Films by Year***

2014	2015	2016
AMERICAN SNIPER	THE BIG SHORT	ARRIVAL
BIRDMAN	BRIDGE OF SPIES	FENCES
BOYHOOD	BROOKLYN	HACKSAW RIDGE
THE GRAND BUDAPEST HOTEL	MAD MAX: FURY ROAD	HELL OR HIGH WATER
THE IMITATION GAME	THE MARTIAN	HIDDEN FIGURES
SELMA	THE REVENANT	LA LA LAND
THE THEORY OF EVERYTHING	ROOM	LION
WHIPLASH	SPOTLIGHT	MANCHESTER BY THE SEA
		MOONLIGHT

#1 SENIORS ARE SCARCE IN FILM

Among the 25 Best Picture-nominated movies, 1,256 speaking characters with an identifiable age were observed. **Only 148 (11.8%) were 60 years of age or older, which is 6.7% below U.S. Census**.[9] In this section, we examine the demographic attributes of these characters and how the percentages may vary by the year nominated.

Of the 148 characters, 77.7% were men (*n*=115) and 22.3% (*n*=33) were women. This is a gender ratio of 3.5 males to every 1 female. The distribution of the 33 female characters varied by year (see Table 2), with 13 (39.4%) in 2014 movies, 16 (48.5%) in 2015 movies, but only 4 (12.1%) in 2016 movies. **Clearly, 2016 is a problematic year for depictions of senior women on screen.**

Table 2
Senior Characters by Gender and Year
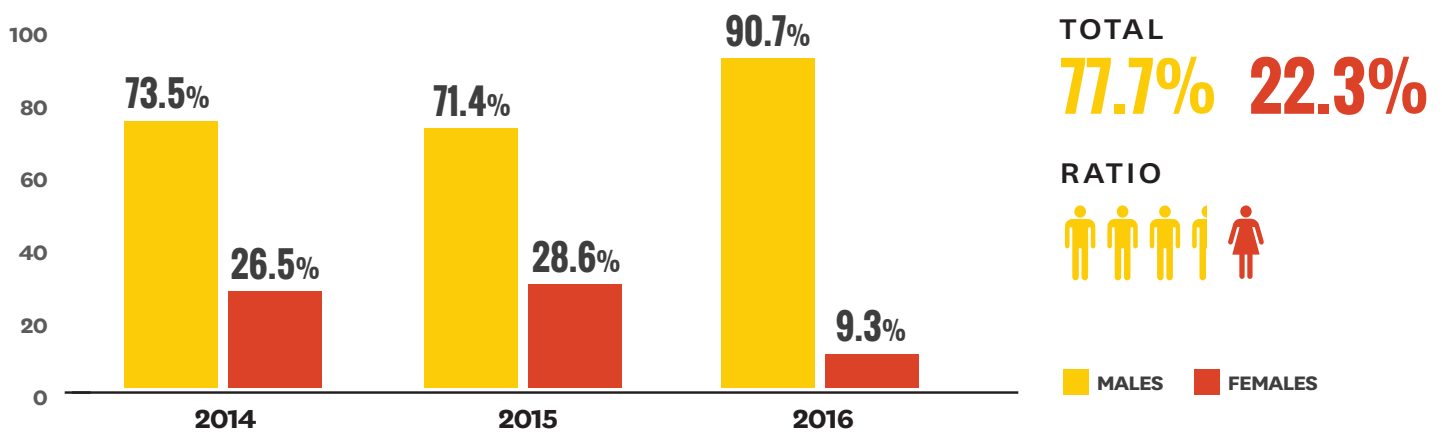
Turning to race/ethnicity, a full 89.9% (*n*=133) of the senior characters were white, 6.1% Black (*n*=9), 2% Asian (*n*=3), and 2% (*n*=3) were from "other" or mixed racial/ethnic backgrounds (1 American Indian/Alaskan Native, 1 Middle Eastern, 1 mixed races/ethnicities). **Notably, not one senior character was coded as Hispanic/Latino.** These trends reveal that senior characters are largely whitewashed in Best Picture-nominated Oscar films over the last three years.

Prior to conducting the yearly analysis, the race/ethnicity measure was collapsed into categories: white vs. underrepresented (i.e., Black, Asian, Other). As shown in Table 3, 2016 depicted a few more underrepresented senior characters than 2014 or 2015. **Crossing underrepresented status by gender revealed that only 4 diverse senior women were coded across the 25 movies.** All four of these characters were Black women. Thus, senior women are only Black or white across more than two dozen movies evaluated.

Table 3
Senior Characters by Underrepresented Status & Year

Percentage of Senior Underrepresented Characters:

10.2%	5.4%	16.3%	10.1%
2014	**2015**	**2016**	**TOTAL**
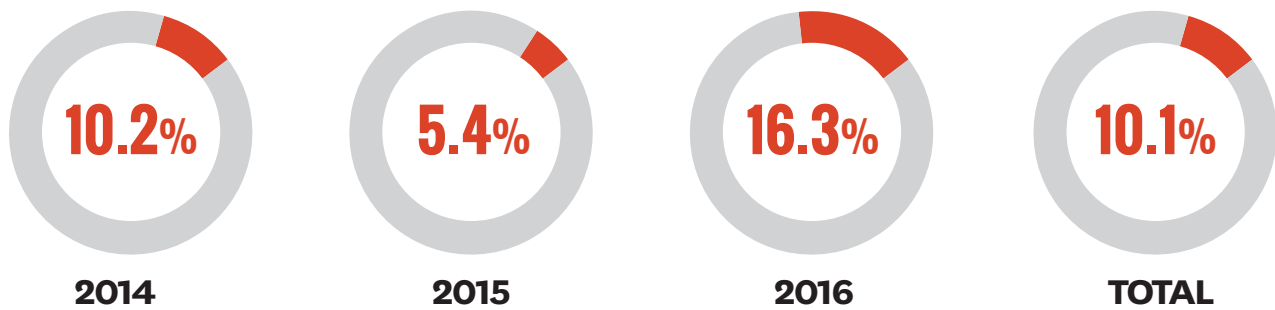
All senior characters were also assessed for LGBT status. Not one character 60 years of age or older was coded as Lesbian, Gay, Bisexual or Transgender.

Senior characters are scarce in Best Picture-nominated films. This is not surprising, as only 11% of all speaking characters were age 60 and older in the 100 top-grossing movies of 2015. Additionally, the lack of female seniors, seniors from underrepresented racial/ethnic groups, and LGBT seniors demonstrates that neither popular movies nor critically acclaimed films showcase the lives and stories of seniors. At a time when diversity at the Academy Awards and within the Academy are regarded with scrutiny, seniors must not be lost in the conversation.

#2 SENIORS ARE LEFT OUT OF THE 2016 INCLUSION INCREASE

While the findings above focus on senior characters, a broader look at the demographics of non-senior characters was undertaken. This was done to explore how seniors fare in relation to other groups who have been vocal about exclusion by the Academy Awards. To that end, the gender, race/ethnicity, and LGBT status of characters age 59 and under were assessed.

Of the 1,108 non-senior characters, 69.3% (*n*=768) were male and 30.7% (*n*=340) were female. This overall percentage of female characters is 8.4% higher than the percentage of female seniors. The distribution of the female characters differed across the years evaluated. As shown in Table 4, 2014 had the lowest percentage of female characters under age 60, while 2016 had the highest. Senior female characters faced a decrease in 2016, as only 9.3% of senior characters in Academy Award-nominated films were female in 2016.

Table 4
Non-Senior Characters by Gender and Year

GENDER	2014	2015	2016	TOTAL
MALES	71.9%	70.3%	65.3%	69.3%
FEMALES	28.1%	29.7%	34.7%	30.7%
RATIO	2.6 TO 1	2.4 TO 1	1.9 TO 1	2.3 TO 1

In terms of race/ethnicity, 76.4% (*n*=843) of non-senior characters were white, 2.4% (*n*=27) were Hispanic/Latino, 11.3% (*n*=125) were Black/African American, 5.7% (*n*=63) were Asian, 1.6% (*n*=18) were Middle Eastern, and 2.5% were from other or mixed races/ethnicities (6 American Indian/Alaskan Native, 1 Native Hawaiian/Pacific Islander, 21 mixed races/ethnicities). Characters from underrepresented racial/ethnic groups represent 23.6% (*n*=261) of all non-senior characters in Best Picture-nominated films. This is 13.5% higher than the percentage of underrepresented seniors in the same movies.

Table 5
Non-Senior Characters by Underrepresented Status & Year

Percentage of Non-Senior Underrepresented Characters:

21.6%	12.3%	38.2%	23.6%
2014	**2015**	**2016**	**TOTAL**
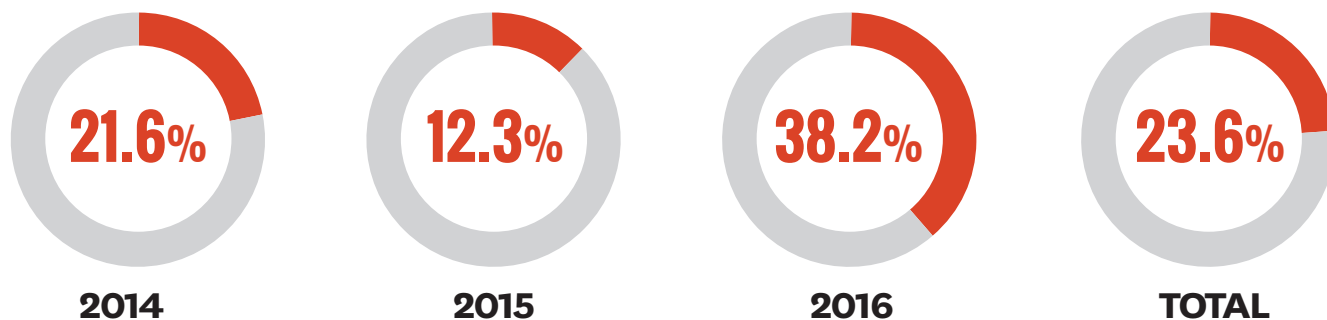
This differed by year, with 2015 (12.3%) showcasing the lowest percentage of underrepresented characters. 2016 (38.2%) was the strongest year for underrepresented performers, while 2014 (21.6%) held a middle position. In 2016, the proportion of underrepresented characters matched the percentage of underrepresented individuals in the U.S. population, 38.4%.[10] This is in line with the praise for the more diverse list of individual Academy Award nominees in 2016 and the controversy surrounding the lack of inclusion in prior years.

Less than 1% of non-senior characters were Lesbian, Gay, or Bisexual across the sample. Seven characters were gay and three were bisexual. This differed somewhat per year. 2016 (1.4%, *n*=5) had the highest percentage of LGB characters, followed by 2014 (1%, *n*=4) and 2015 (0.3%, *n*=1). No Transgender characters appeared across the three years of Best Picture nominated movies.

In sum, there is more inclusion across gender, race/ethnicity, and LGB status among non-senior than senior characters in Academy Award-nominated films. There has also been some improvement in the percentage of non-senior characters from some of these groups over the years studied. However, it is clear from these results that when activists take aim at the Academy Awards, they are not focused on senior representation. This exclusion leaves seniors—especially women, people of color, and the LGBT community—out of the picture.

#3 LEADS ARE LOPSIDED IN OSCAR FILMS

In addition to speaking characters, we looked at whether senior characters occupied a leading role in the film. Of all the leads and co leads driving the action (*n*=29), only one (3.4%) was played by a character 60 years of age or older: Michael Keaton in *Birdman, or The Unexpected Virtue of Ignorance*. Turning to ensemble casts, only 1 of the 6 (16.7%) leading characters was a senior. Ironically, the sole lead in an ensemble was Michael Keaton in
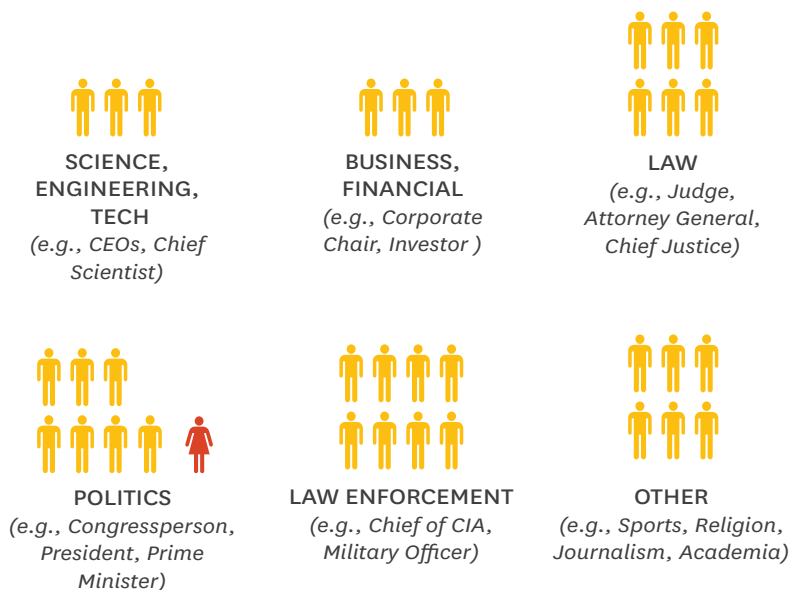
Spotlight. **Thus, the only two senior leads across the 25 films were played by the same white male actor**. The analysis of leads by year was not completed due to the small sample size.

Aside from age, the gender, race/ethnicity, and LGBT status of leading characters was examined. Nearly one-quarter (24.1%, *n*=7) films featured a female lead or co lead character. This is lower than the percentage of female leads (32%) in the 100 top movies of 2015.[11] Underrepresented characters filled 20.7% (n=6) of lead or co lead roles across the three years examined. Finally, 10.3% (*n*=3) of leading or co leading characters were LGBT. Among the six leading ensemble characters, only 1 was female (16.7%), and none were from underrepresented groups or the LGBT community. While there are still few female, underrepresented or LGBT characters at the center of critically acclaimed movies, these characters outnumber seniors as the driving force in movies.

#4 OCCUPATIONAL PRESTIGE IS THE PROVINCE OF MALE SENIORS

Over two-thirds (68.2%, *n*=101) of senior characters in Academy Award-nominated films were depicted with a job. This differed by gender, as 42.4% of senior females (*n*=14) held an occupation and 75.7% (*n*=87) of senior males worked.

Table 6
Occupational Clout of Employed Senior Characters by Gender

SCIENCE, ENGINEERING, TECH
(e.g., CEOs, Chief Scientist)

BUSINESS, FINANCIAL
(e.g., Corporate Chair, Investor)

LAW
(e.g., Judge, Attorney General, Chief Justice)

POLITICS
(e.g., Congressperson, President, Prime Minister)

LAW ENFORCEMENT
(e.g., Chief of CIA, Military Officer)

OTHER
(e.g., Sports, Religion, Journalism, Academia)

Each occupation was evaluated qualitatively to determine the sector of employment (e.g., Law, Finance, Politics), as well as the level of clout, or prestige, attached to the position. While the occupation of all senior characters was assessed, only results related to those in top jobs will be presented here. A full 34% (*n*=34) of employed senior characters held high occupational clout in their fields.[12] The breakdown of high clout positions by sector is shown in Table 6. Only sectors with three or more characters in high-level jobs are presented, with the remaining included in the "other" category.

The data in Table 6 reveal that senior male characters overwhelmingly hold prestigious occupations. **Only one female character was depicted in a high clout position, which is a gender ratio of 33 to 1**. This female character, former U.S. Delegate from the Virgin Islands, Donna Christian-Christensen, appeared briefly on screen in archival footage. This means that viewers would not see a single senior female character in a powerful occupational role in 24 of the 25 Best Picture-nominated films over the last three years. For underrepresented senior characters, the picture was similarly disheartening. **In terms of race/ethnicity, only 4 seniors (11.8%) from underrepresented racial/ethnic groups (2 Black, 1 Asian, 1 Other) held powerful occupations across the sample. Not one portrayal involved a Hispanic/Latino senior.**

The findings above are not surprising, given the occupational portrayal of seniors in Hollywood. Based on an analysis of the 100 top films of 2015, 28.3% of seniors holding a job were in a high-clout position. Senior males outnumbered senior females in these jobs by a ratio of 7.7 to 1.[13] Seniors from underrepresented racial/ethnic groups were less likely to hold top jobs than their white counterparts, and again no prestigious occupations were held by Hispanic/Latino characters.[14] As with the larger scope of Hollywood movies, these critically-acclaimed stories fail to present a view of reality in line with the world these films portray. **Senior characters—in particular females and individuals from underrepresented racial/ethnic groups—rarely have the opportunity to wield occupational power on screen**.

#5 SENIOR DEATH DIVERGES FROM REAL WORLD CAUSES

The well-being of senior characters was evaluated qualitatively. Only 6.1% (*n*=9) of seniors faced a health issue. The majority of these health problems were shouldered by males (88.9%, *n*=8) rather than females (11.1%, *n*=1). White characters (88.9%, *n*=8) were likely to face ill health, as only 1 Black character experienced a health-related issue.

The nature of these problems fell into one of two areas. Two-thirds (66.7%, *n*=6) of the characters with a health-related issue had some form of physical, communicative, or mental impairment. These included difficulty walking, hearing, or evidence of memory loss. The 3 remaining characters (33.3%) were afflicted with a physical illness or disease. Few characters (2.7%, *n*=4) used any means of ameliorating their health problems. Of these 4 characters, 2 utilized assistive devices (i.e., cane, hearing aid) and 2 relied on medicinal or chemical assistance.

Table 7
Leading Causes of Senior Death in Film vs. Population

FILM	U.S. POPULATION
Violence (shot, poisoned)	**Heart Disease**
Natural or Non-Specific Cause	**Malignant Neoplasms**
	Chronic Lower Respiratory Diseases

In addition to health problems, the death of senior characters was assessed. Only 8.8% (*n*=13) of individuals age 60 and above perished during the course of the film. However, of these individuals, the vast majority (84.6%, *n*=11) lost their lives as a function of violence (i.e., shot, poisoned). The remaining two individuals (15.4%) died of non-specific or natural causes. These results are very similar to popular movies—79.2% of senior deaths in the 100 top films of 2015 were the result of violence.[15] As we noted in that previous study, the violent means that accompany senior death in film stand in stark contrast to the major causes of death in the U.S. population for those 65 and older. As shown in Table 7, heart disease, cancer, or other respiratory ailments are greater threats[16] to the lives of U.S. seniors—but clearly are less likely to inspire Hollywood storytellers.

#6 THE ACADEMY AWARDS CANNOT ESCAPE AGEISM

The language used to refer to senior characters and aging in general was captured across the 14 films featuring a leading or supporting senior character. These ageist comments consisted of verbal or nonverbal references to age or other traits negatively associated with aging. References could be made by the senior character or by someone else.

Six (42.9%) of the 14 films with a leading or supporting senior character featured an ageist comment. These comments were sorted into several categories. First, general statements about age were assessed. A full 35.7% (n=5) of the films with prominent senior characters included general derogatory comments about aging. Examples of these comments include: *"You look so old in person"* and *"The extremity of her age belied the delightful liveliness of her personality."*

The second category assessed was comments about health and movement. Comments in this category appeared in 14.3% of the films (n=2) with leading or supporting senior characters. Examples included referencing an inability to perform a manual task by stating *"Hell, must be gettin' old."*

Two films (14.3%) contained derogatory references to cognition or senses. These included comments such as *"He's a ruthless adventurer and a con artist who preys on mentally feeble, sick old ladies and he probably f---s them too"* and asking if a senior character would rather hear new information or *"…just sit here and let Alzheimer's run its course."*

Finally, one film (7.1%) included a death-related comment and one film (7.1%) an appearance-related reference. Of the films with a leading or supporting senior, 21.4% (n=3) contained dialogue that emerged from characters other than the senior being targeted. One movie featured a senior character making a self-focused ageist comment. The remaining 14.3% (n=2) of films contained ageist comments that emerged from both self and other seniors.

It is clear from this analysis that critically praised movies still invoke outdated stereotypes about what it means to be a senior citizen. These results parallel previous findings on ageist comments in popular movies. Across the 100 top-grossing movies of 2015, over half of films with leading and supporting senior characters contained at least one ageist comment.[17] Even among films that are purported to showcase the best of Hollywood's creativity and skill, discussions of aging differ little from dialogue in film more broadly.

CONCLUSION

The purpose of this investigation was to assess the presence and portrayal of senior characters in Academy Award-nominated films. A total of 25 movies across the past three years were analyzed. Three major findings emerged.

SENIORS ARE SCARCE IN BEST PICTURE-NOMINATED MOVIES

Of 1,256 characters evaluated, only 11.8% were 60 years of age or older, despite representing 18.5% of the U.S. population[18] and 14% of film ticket buyers.[19] The story grows worse when other factors are considered. Only 22.3% of senior characters in these acclaimed films were female, and 10.1% were from an underrepresented racial/ethnic group. Finally, there were no senior LGBT characters depicted across three years of Oscar-nominated films. From these results it is clear: age can no longer be excluded from the conversation about diversity in Academy Award-nominated movies. Best Picture nominees also differ little from the broader landscape of film—11% of all speaking characters in the 100 top films of 2015 were age 60 and older. Senior females, people of color, and LGBT seniors were seldom seen in these movies.

In contrast to seniors, there is greater representation among non-senior characters in Academy Award-nominated movies, particularly those from 2016. The participation of female characters under age 60 increased slightly over time, and in 2016 over one-third (34.7%) of speaking characters were girls and women. Underrepresented characters also reached proportional representation in 2016. These findings suggest that Hollywood is capable of making and recognizing the merits of films that reflect the reality we see off screen. However, there is still more to be done to ensure that the portrayal of seniors in movies matches the world we inhabit.

Among leading characters, there was only one senior lead or co lead character and one senior member of a leading ensemble. Both of these characters were played by the same white, male actor. In contrast, non-senior leads or co leads were 24.1% female, 20.7% underrepresented, and 10.3% were LGB. Ensemble characters were not as inclusive of these groups, however. Once again, despite the presence of films that showcase the stories of other groups, seniors still are not at the center of storytelling.

OCCUPATIONAL PRESTIGE IS THE PROVINCE OF MALE SENIORS

Examining the occupational status and clout of senior characters reveals a masculine picture of leadership. Only 1 female senior was depicted in a powerful occupational post, a fleeting portrayal of a U.S. politician. Additionally, few senior characters from underrepresented racial/ethnic groups appear in positions of occupational influence. These findings echo results from previous work on the disparity of on screen employment for female characters of all ages in film.[20] The consistent portrayal of male leaders in film means that audiences across the life span do not see a portrait of authority and achievement that reflects reality by including females and people of color.

THE ACADEMY AWARDS CANNOT ESCAPE AGEISM

Despite the accolades for the films nominated for an Academy Award, the findings of this study indicate that content creators still rely on stereotypes about aging when crafting dialogue. A full 42.9% of the films with leading or supporting senior characters contained derogatory references to age or aging. This dependence on demeaning

language is curious, considering that the majority of senior characters in this study were depicted as healthy. Whether the origin of these comments are convenience or ignorance, the use of language that ridicules seniors and the aging process is no laughing matter.

At least two limitations of this study should be noted. The first is the small sample size of films. Only a handful of movies compete for the Best Picture award each year, and the sample was designed to reflect this select group. Given this small set of movies and the few senior characters included in some analyses, generalizing beyond the findings presented here is not prudent. Second, some of the variables in this analysis were assessed qualitatively. Individuals utilizing more quantitative measures or different definitions could derive different results.

The Academy Award for Best Picture represents the pinnacle of a film's critical success. However, the award comes near the end of a film's journey to audiences, not the beginning. Thus, to remedy the lack of inclusion of senior characters in film, it is important to look earlier—to the content creators, executives, and talent who craft these cinematic tales. The Academy of Motion Picture Arts and Sciences continues to evolve to reflect a broader, more inclusive group of storytellers. As this occurs, so too should the films it highlights advance to portray compelling, diverse, and vital senior characters.

ACKNOWLEDGMENTS

MDSC INITIATIVE RESEARCH TEAM

Celine Carrasco	Samantha Cioppa	Maria Vitoria Marques
Kelly Ching	Audrey Deighan	Edward Lau
Christine Choi	Megan Jackson	Rachael Woods

FOOTNOTES

1. U.S. Census Bureau (n.d.). *Age Groups and Sex: 2010*. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_QTP1&prodType=table

2. Motion Picture Association of America (n.d.). *Theatrical Market Statistics: 2015*. http://www.mpaa.org/wp-content/uploads/2016/04/MPAA-Theatrical-Market-Statistics-2015_Final.pdf

3. Horn, J., Sperling, N., & Smith, D. (2012, February 19). Unmasking Oscar: Academy voters are overwhelmingly white and male. *Los Angeles Times*. http://www.latimes.com/entertainment/la-et-unmasking-oscar-academy-project-20120219-story.html

4. Academy of Motion Picture Arts and Sciences (2016). *Introducing the Academy Class of 2016*. http://www.app.oscars.org/class2016/?hq_e=el&hq_m=467892&hq_l=1&hq_v=651257b717#

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

6. The independent speaking character is the primary unit of analysis in this study. An independent speaking character is a living being that discernibly utters one or more words, or is named, and appears on screen. A second unit of analysis is the entire film.

As we required that all characters be independent, those that spoke in unison were not counted. Additionally, when the individual appearance of characters who spoke sequentially could not be discerned, they were classified as a group and evaluated as such. No groups are included in the analyses.

Characters could undergo a change in type, age, sex, or race/ethnicity over the course of the plot. When this demographic change occurred, a new line of data was created. A total of 6 demographic changes occurred among characters age 60 or above. These individuals were included in the analysis for leading and supporting characters when applicable.

Following unitizing decisions, a suite of measures were assessed for each character. These measures are described in full in previous Media, Diversity, & Social Change Initiative reports (http://annenberg.usc.edu/MDSCI). Each character was evaluated for the following variables: *type* (i.e., human, animal, supernatural creature, anthropomorphized supernatural creature); *age* (i.e., 0-6, 7-12, 13-20, 21-39, 40-64, 65+); *sex* (i.e., male, female); and *race/ethnicity* (i.e., White, Black, Hispanic/Latino, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Asian, Middle Eastern, Other/Mixed race).

In addition to the values above, two further codes were used. "Can't tell" referred to instances in which it was impossible to render a judgment from the information provided (or not provided) by the plot. When measures were not pertinent to a character, "not applicable" was used.

The apparent sexuality of characters was also evaluated. Apparent sexuality referred to the character's voluntary, authentic, and enduring romantic and sexual proclivity toward males, females, or both. There were four values for this variable: lesbian, gay, bisexual, or not lesbian, gay, or bisexual. Characters who identified as the opposite gender to their biological sex were coded as transgender, excluding cross dressing, drag performances, or identification as "gender non conforming." When individuals who are known to be transgender outside the context of the film appeared, they were coded as transgender.

Data collection was similar to other MDSC Initiative reports. Research assistants consisted of individuals who were trained in a classroom setting by one of the study authors (Choueiti). As part of this training, each individual underwent a series of training diagnostics to ensure the consistent application of the rules of data collection. Three individuals viewed every film for unitizing and character coding. Unitizing agreement reflects the number of lines captured by 2 out of 3 coders. Across the 10 films assessed for the first time in this analysis, 3 had unitizing agreement between 91.7% and 93.75%. Five movies had unitizing agreement between 80.8% and 85.5%. One film achieved 75.6% unitizing agreement. The final film fell below 70% (61.5%) in terms of unitizing agreement.

Reliability was computed per film, and discussions were held to resolve any disagreements across the three individuals. The Potter & Levine-Donnerstein (1999) formula was used to compute reliability per variable. Relevant measures are reported here. The median across the 10 films is reported first, followed by the mean and range in parentheses. *Role* 1.0 (*M*=1.0, range=1.0), *age* 1.0 (*M*=.93, range=.65-1.0), *sex* 1.0 (*M*=1.0, range=1.0), *race/ethnicity* 1.0 (*M*=1.0, range=1.0), *apparent sexuality* 1.0 (*M*=1.0, range=1.0), and *transgender* 1.0 (*M*=.92, range=.61-1.0).

Unitizing agreement and reliability for 15 movies from 2014 and 2015 are reported in previous MDSC Initiative reports.

7. Age was determined by sorting characters into one of five age brackets: *child* (0-12), teen (13-20), *young adult* (21-39), *middle age* (40-64), and *elderly* (65 and above). Every character coded as middle aged and elderly was further scrutinized. Using online sources, including IMDbPro, Variety Insight, and Studio System, coders found information associated with the actor's age (birth date, graduation date, age listing). When actors played characters of the same age, the actor's age was used. When the film or historical context provided a character's age, that information was used. If the actor or the character's birth date was not available, a judgment was rendered in consultation with MDSC senior leadership.

8. All characters age 60 and older were evaluated across five measures which assessed a character's employment, health, home, use of assistive device, and physical appearance. Three individuals made judgments about each character and disagreements were resolved through discussion with one of the lead authors (Choueiti).

Additional attributes of primary and secondary characters age 60 and older were evaluated qualitatively. This assessment focused on health (e.g., cognitive abilities, physical activity), relationships (i.e., family, romantic, occupation), leisure activities, ageist comments, and concerns. Two individuals watched each movie, recording their decisions for each primary or secondary character. Responses were discussed and adjudicated with one of the lead authors (Choueiti).

9. U.S. Census Bureau (n.d.). *Age Groups and Sex: 2010*. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=DEC_10_SF1_QTP1&prodType=table

10. U.S. Census Bureau (n.d.). *Quick Facts*. Available: https://www.cen-

sus.gov/quickfacts/table/PST045216/00

11. Smith, S.L., Choueiti, M., & Pieper, K. (2016). *Inequality in 800 Popular Films: Examining Portrayals of Gender, Race/Ethnicity, LGBT, and Disability from 2007-2015*. Media, Diversity, & Social Change Initiative, USC Annenberg. Los Angeles, CA. http://annenberg.usc.edu/pages/~/media/MDSCI/Dr%20Stacy%20L%20Smith%20Inequality%20in%20800%20Films%20FINAL.ashx

12. For a description of how clout was coded, see Smith et al. (2016).

13. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*.

14. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*.

15. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*.

16. National Center for Health Statistics (2014). T*able 20. Leading causes 16 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

17. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*.

18. U.S. Census Bureau (n.d.). *Age Groups and Sex: 2010*. Available: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview. xhtml?pid=DEC_10_SF1_QTP1&prodType=table

19. Motion Picture Association of America (2016). *Theatrical Market Statistics: 2015*. http://www.mpaa.org/wp-content/uploads/2016/04/MPAA-Theatrical-Market-Statistics-2015_Final.pdf

20. Smith, S.L., Choueiti, M., Prescott, A., & Pieper, K. (2012). *Gender Roles & Occupations: A Look at Character Attributes and Job-Related Aspirations in Film and Television*. Media, Diversity, & Social Change Initiative, USC Annenberg. Los Angeles, CA. Report prepared for the Geena Davis Institute on Gender in Media. http://annenberg.usc.edu/pages/~/media/MDSCI/Gender%20Roles%20%20Occupations%20Short%20Report.ashx. Smith, S.L., Choueiti, M., & Pieper, K. (2014). *Gender Bias Without Borders: An Investigation of Female Characters in Popular Films Across 11 Countries*. Media, Diversity, & Social Change Initiative, USC Annenberg. Los Angeles, CA. Report prepared for the Geena Davis Institute on Gender in Media. http://annenberg.usc.edu/pages/~/media/MDSCI/Gender%20Bias%20Without%20Borders%20Executive%20Summary. ashx. Smith, S.L., Pieper, K., & Choueiti, M. (2016). *The Rare & Ridiculed: Senior Citizens in the 100 Top Films of 2015*.