Inequality in 1,200 Popular Films:
Examining Portrayals of Gender, Race/Ethnicity, LGBTQ & Disability from 2007 to 2018

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September 2019

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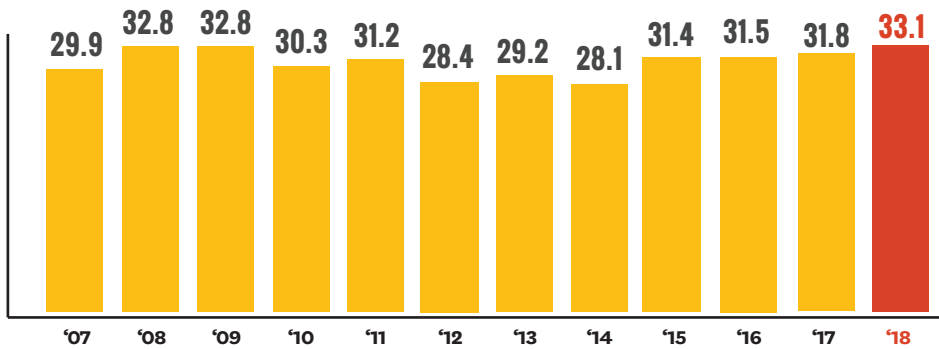# INEQUALITY IN 1,200 POPULAR FILMS
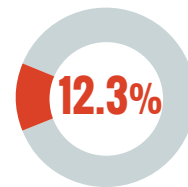
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NEW YEAR, NO PROGRESS IN THE NUMBER OF FEMALES ON SCREEN

Prevalence of female speaking characters across 1,200 films, in percentages

'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18
29.9	32.8	32.8	30.3	31.2	28.4	29.2	28.1	31.4	31.5	31.8	33.1

Percentage of 1,200 films with Balanced Casts **12.3%**
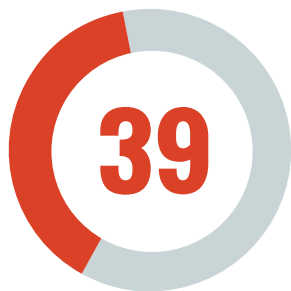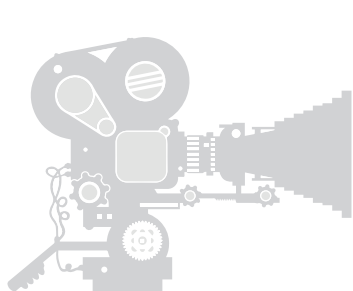
Ratio of males to females **2.2 : 1**

Total number of speaking characters **53,178**

PROGRESS TOWARD PARITY FOR FEMALE LEADS

Of the 100 top films in 2018...

39 Depicted a **Female Lead** or **Co Lead**

33 films in 2017 and 34 in 2016 depicted a female lead or co lead.

And of those Leads and Co Leads*...

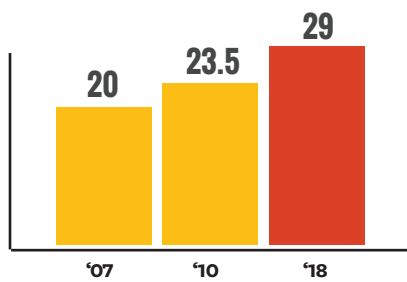**11** Female actors were from **underrepresented racial / ethnic groups**

11 Female actors were at least **45 years of age or older**

Excludes films w/ensemble casts

FOR FEMALES, NOT ALL GENRES ARE EQUAL

ACTION AND/OR ADVENTURE

'07	'10	'18
20	23.5	29

% OF FEMALE SPEAKING CHARACTERS

ANIMATION

'07	'10	'18
20.9	30.7	31.3
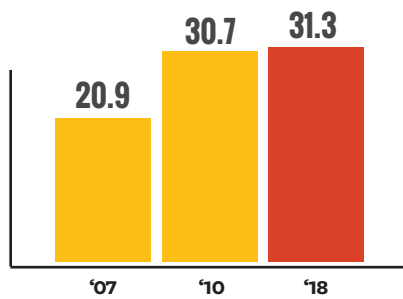
% OF FEMALE SPEAKING CHARACTERS

COMEDY

'07	'10	'18
36	35.6	37.5
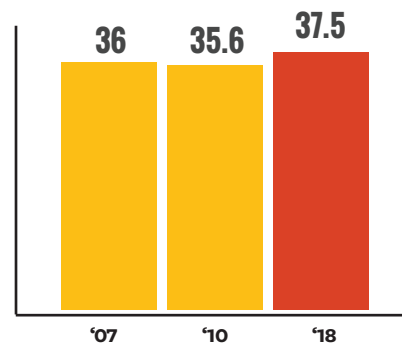
% OF FEMALE SPEAKING CHARACTERS

STEREOTYPICALLY SEXY: THE PLIGHT OF WOMEN AND GIRLS IN FILM
Top Films of 2018

SEXY ATTIRE
- 7.4% MALES
- 29.2% FEMALES

SOME NUDITY
- 8.5% MALES
- 27.3% FEMALES

ATTRACTIVE
- 2.7% MALES
- 10.2% FEMALES

● MALES
● FEMALES

13-20 yr old females are just as likely as **21-39** yr old females to be shown in sexy attire with some nudity, and to be referenced as attractive.

INCREASED INCLUSION FOR RACIAL/ETHNIC GROUPS IN 2018

- WHITE 63.7%
- BLACK 16.9%
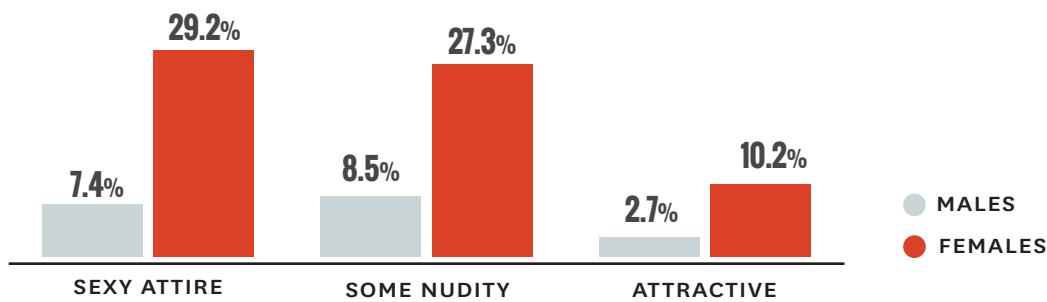- LATINO 5.3%
- ASIAN 8.2%
- OTHER 5.9%

The percentage of White characters has decreased 13.9% since 2007.
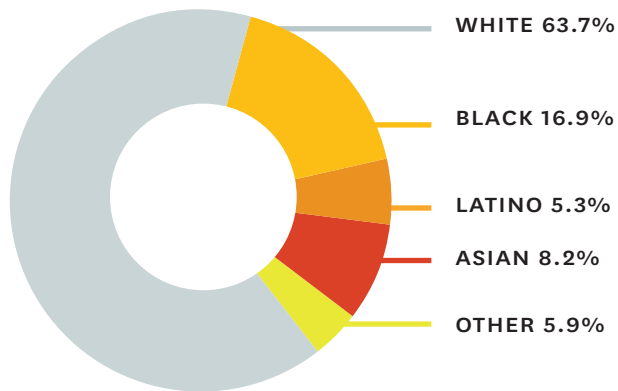
percentage of **under-represented characters**: **36.3%**

12 films have **NO Black or African American** speaking characters

47 films have **NO Latino** speaking characters

32 films have **NO Asian** speaking characters

LGBT CHARACTERS ARE LEFT BEHIND IN FILM

Of **4,387** speaking characters only...

	'14	'15	'16	'17	'18			'14	'15	'16	'17	'18	
	12	19	36	16	33	GAY		5	5	6	6	8	BISEXUAL
	4	7	9	9	17	LESBIAN		0	1	0	0	0	TRANSGENDER

of the 100 top films of 2018...
- 76 HAD NO LGB CHARACTERS
- 24 HAD 1 OR MORE LGB CHARACTERS

of the 58 LGB characters...
- 63.8% WHITE
- 36.2% UNDERREPRESENTED

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CHARACTERS WITH DISABILITY FACE A DEFICIT ON SCREEN IN FILM

1.6% of all speaking characters were depicted with a disability

55.1% PHYSICAL

30.4% COGNITIVE

27.5% COMMUNICATIVE

Based on U.S. Census domains

72.5% MALES WITH DISABILITY

27.5% FEMALES WITH DISABILITY
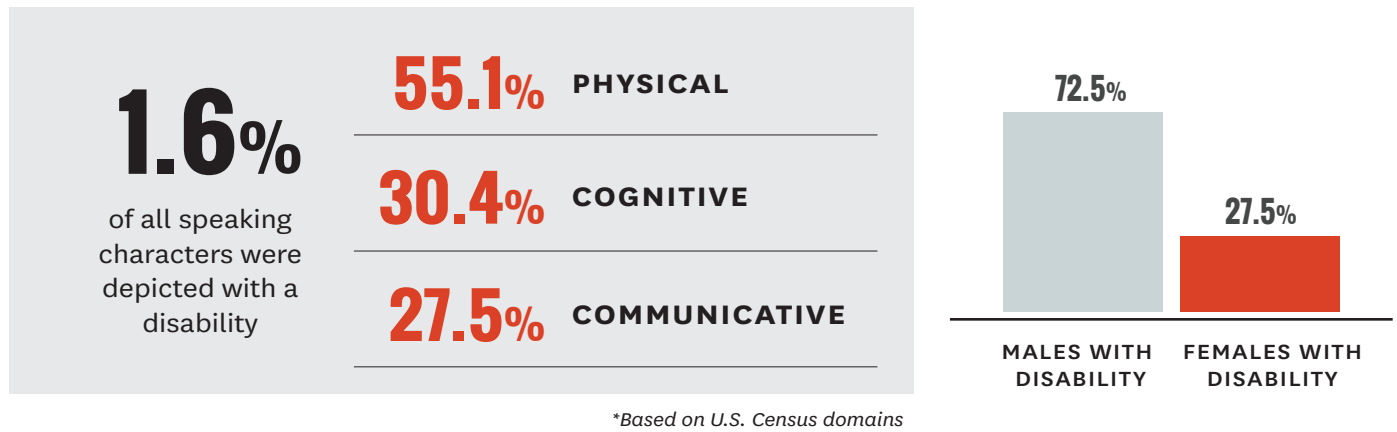
THE STATISTICS FOR WOMEN BEHIND THE CAMERA ARE STATIC

Across 1,135 content creators....

● MALES ● FEMALES

DIRECTORS

4.5%

5 FEMALE DIRECTORS

WRITERS

14.4%

46 FEMALE WRITERS

PRODUCERS

21.1%

239 FEMALE PRODUCERS

COMPOSERS

2.8%

3 FEMALE COMPOSERS
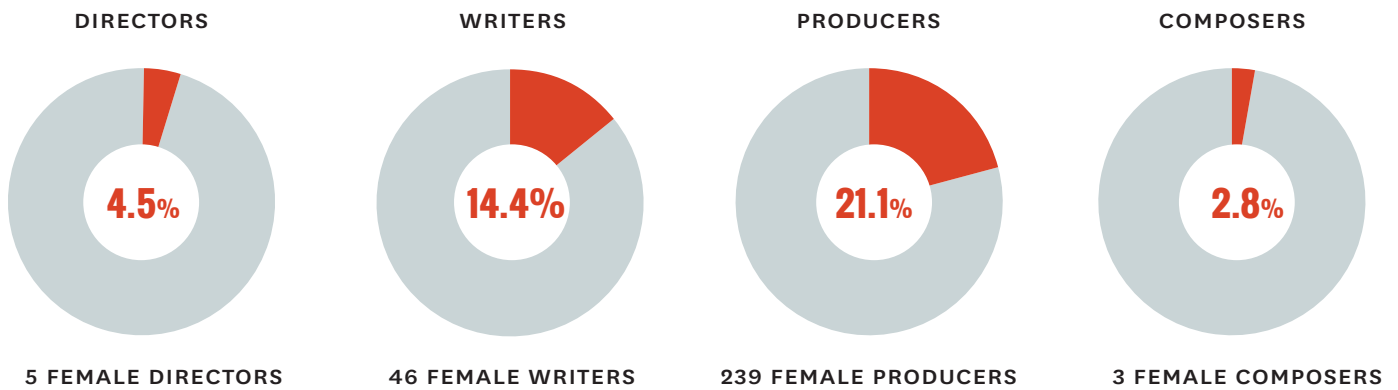
THE INCLUSION CRISIS IN FILM

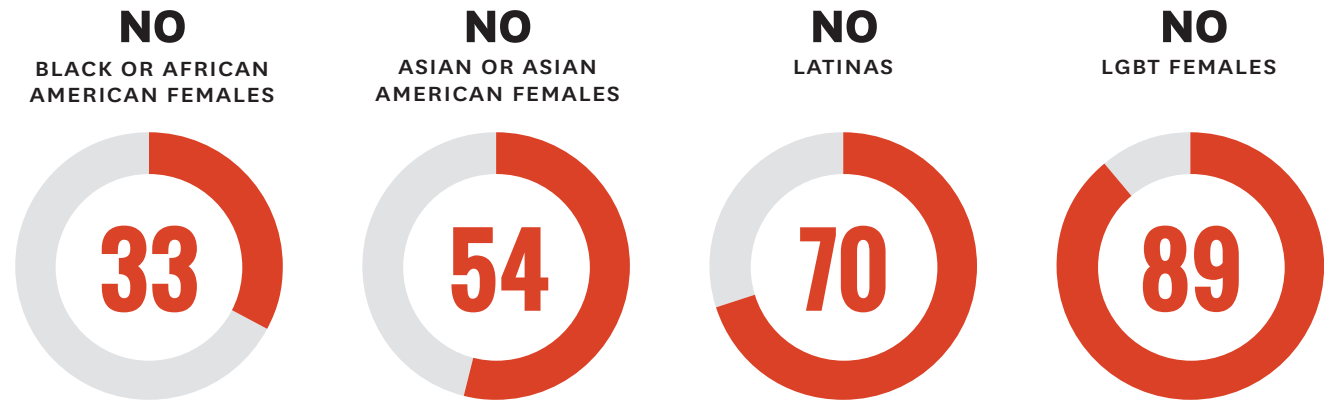| UNDERSERVED GROUPS IN FILM	FILMS WITHOUT ANY CHARACTERS	PERCENTAGE OF SPEAKING CHARACTERS	U.S. POPULATION	DIFFERENCE (Characters-Population)
FEMALE CHARACTERS	0	33.1%	50.8%	-17.7
CHARACTERS W/DISABILITIES	58	1.6%	27.2%	-25.6
LATINO CHARACTERS	47	5.3%	18.3%	-13
LGBT CHARACTERS	76	1.3%	4.5%	-3.2
BLACK CHARACTERS	12	16.9%	13.4%	+3.5
ASIAN CHARACTERS	32	8.2%	5.9%	+2.3

Note: U.S. Census was used for all groups except LGB. That point statistic was from Williams Institute (2019).

DIRECTORS AND COMPOSERS: FEW FEMALES FILL THESE ROLES

	'07	'08	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18	OVERALL
58 FEMALES OUT OF **1,335** DIRECTORS	3	9	4	3	4	5	2	2	8	5	8	5	**4.3%**
	112	112	111	109	108	121	107	107	107	120	109	112	
19 FEMALES OUT OF **1,327** COMPOSERS	0	2	2	2	1	2	2	1	1	2	1	3	**1.4%**
	107	108	109	115	109	105	114	105	114	121	111	109	

THE EPIDEMIC OF INVISIBILITY IN FILM

Of the 100 top films of 2018, the number of films with…

NO
BLACK OR AFRICAN AMERICAN FEMALES
33

NO
ASIAN OR ASIAN AMERICAN FEMALES
54

NO
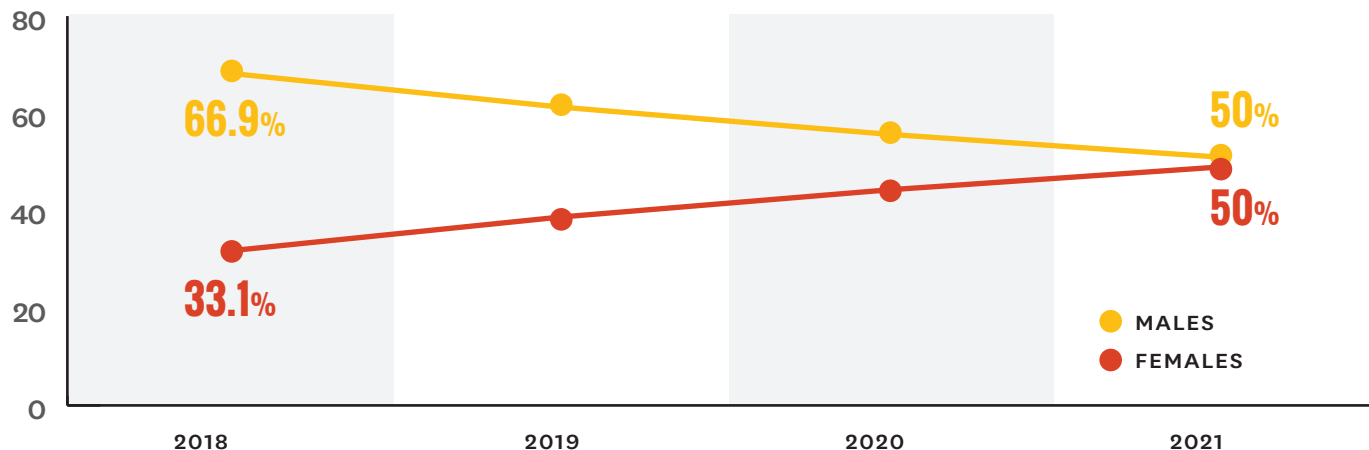LATINAS
70

NO
LGBT FEMALES
89

99 FILMS HAD NO AMERICAN INDIAN/ALASKA NATIVE FEMALES
97 FILMS HAD NO NATIVE HAWAIIAN/PACIFIC ISLANDER FEMALES
92 FILMS HAD NO MIDDLE EASTERN/NORTH AFRICAN FEMALES
51 FILMS HAD NO FEMALES FROM MULTIRACIAL/OTHER GROUPS
83 FILMS HAD NO FEMALE CHARACTERS WITH DISABILITIES

STRATEGIC SOLUTIONS TO FOSTER SYSTEMIC CHANGE ON SCREEN & BEHIND THE CAMERA

SET TARGET INCLUSION GOALS

UNCOUPLE LEAD & DIRECTOR CHARACTERISTICS

CAST INCLUSIVELY IN EVERY LOCATION

JUST ADD FIVE

FOCUS ON LEAD ROLES

HIRE WOMEN MORE THAN ONCE

COMBAT IMPLICIT & EXPLICIT BIAS

PERCENTAGE OF SPEAKING ROLES BY GENDER: JUST ADD FIVE

Add Five Females to Scripts Per Year to Achieve Gender Equality Quickly

Line chart showing percentage of speaking roles by gender from 2018 to 2021. Males start at 66.9% in 2018 and decline to 50% in 2021. Females start at 33.1% in 2018 and rise to 50% in 2021. Legend: MALES (yellow), FEMALES (red).

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Key Findings

Gender

On Screen. Only 33.1% of all speaking or named characters in the 100 top-grossing films of 2018 (*n*=4,422) were girls/women. The percentage of girls/women on screen in 2018 did not deviate meaningfully from the percentage in 2017 (31.8% female) or 2007 (29.9%).

Only 9% of the movies in 2018 had gender-balanced casts. The percentage of gender-balanced casts was down 10 percentage points from 2017 (19%) and 3 percentage points from 2007 (12%).

The percentage of females in action/adventure movies was higher in 2018 (29%) than 2017 (24.5%) or 2007 (20%).

The number of female leads/co leads was significantly higher in 2018 (39 movies) than in 2017 (33 movies) and almost double the number of films in 2007 (20 movies).

Eleven movies featured a girl or woman of color in the leading or co leading role. While this number was not on par with their male counterparts in 2018 (16 movies), it was nearly three times higher than what was observed in 2017 (4 films). Overall, 27% of the 100 top films featured a person of color driving the plot. This is higher than 2017 (21 movies).

Eleven of the 100 top movies of 2018 featured a female 45 years of age or older at the time of theatrical release in a leading or co leading role. While this was over twice as many as 2017 (5 movies), it was less than half of the movies that featured a male lead or co lead 45 years of age or older in 2018 (24 movies). Out of the 100 top films of 2018, only 4 featured a woman of color 45 years of age or older in a lead or co lead role.

Women 40 years of age and above received only 25% of all speaking or named roles in 2018. The percentage of females 40 years of age or above has not changed over the 12-year time frame of the study.

Females were far more likely than their male counterparts in 2018 to be shown in sexually revealing attire (29.2% vs. 7.4%) and with some nudity (27.3% vs. 8.5%). Girls/women were also more likely than boys/men to be referenced as attractive by other characters (10.2% vs. 2.7%).

Teenage females were just as likely to be sexualized and referenced as attractive by other characters as females 21-39 years of age. Middle aged women were the least likely to be shown in a sexualized light, however.

Behind the Camera. A total of 1,566 content creators (e.g., directors, writers, producers) were employed behind the camera across the 100 top movies of 2018. Over three quarters (81.5%) of these above the line jobs were filled with males and 18.5% were filled with females. This translates into a gender ratio of 4.4 males to every 1 female.

Focusing on directors, 112 were hired across the 100 top films of 2018. A full 107 of these directing jobs were filled by males and 5 by females. Only 14.4% of writers and 21.1% of producers were women.

Over time, there has not been any change in the hiring of female directors across the 100 top fictional films. A total of 4.3% of all directors were women (58 out of 1,335). The woman who has helmed the most movies in the sample directed 4 films, followed by one woman who directed 3. Six women across the sample each have directed 2 films. Given that some female directors work more than once, the total number of individual women hired across the 1,200 movies is 47. The total number of unique men is 657.

For films with male direction only, the percentage of female speaking characters on screen was 32.5%. When a female was attached to direct, that number jumped to 47.6% of all speaking characters - a 15.1 percentage point difference.

In 2018, 3 female composers were attached to the 100 top fictional films. Across the 12-year sample, only 1.4% (19 out of 1,327) of all composers were women. This translates into a gender ratio of 68.8 males to every 1 female.

Race/Ethnicity

On Screen. A total of 3,895 speaking or named characters across the 100 top films of 2018 had an ascertainable race/ethnicity. Of those, a full 63.7% were white, 16.9% Black, 5.3% Latino, 8.2% Asian, 1.5% Middle Eastern/North African (i.e., MENA), <1% American Indian/Alaska Native, <1% Native Hawaiian/Pacific Islander, and 4% multiracial/other. In total, 36.3% of speaking characters were from underrepresented racial/ethnic groups which approximates U.S. Census (39.6%).

The percentage of white characters has decreased significantly in 2018 (63.7%) in comparison to 2017 (70.7%) and 2007 (77.6%). Black characters were at a 12-year high in 2018, though the percentage was just shy of a 5 percentage point difference (+4.8) between 2018 and 2017. A 3.9 percentage point difference was observed from 2007 to 2018 in the percentage of Black characters.

For Asian speaking characters, 2018 (8.2%) was higher than 2007 (3.4%) but just short of the 5 percentage point difference demarcating meaningful change. 2018 (8.2%) was slightly higher than 2017 (4.8%).

Films were less likely to erase Black and Asian characters from 2015 to 2018. The erasure of Latinos has increased from 40 films in 2015 to 47 films in 2018. The number of 2018 films erasing the remaining racial/ethnic groups was as follows: American Indian/Alaska Natives (99 movies), Native Hawaiian/Pacific Islanders (93 movies), MENA (78 movies), and multiracial/other (31 movies).

Across the 100 top films of 2018, 33 films were missing Black/African American female characters, 54 were missing Asian or Asian American female characters, 70 Latina characters, and 51 girls or women from multiracial/other backgrounds. Female characters from the following racial/ethnic groups were also excluded, including American Indian/Alaska Native female characters (99 movies), female Native Hawaiian/Pacific Islanders (97 movies), and MENA girls and women (92 movies). In 2018, fewer films did not show female Black or Asian characters than in 2015 or 2017. Erasure in 2018 was higher than in 2017 (64) for Latinas and does not differ from 2015 (65).

The percentage of underrepresented characters was at a 12-year high in action/adventure movies (40.3% of all speaking characters). 2018 is 12.2 percentage points higher for underrepresented characters than 2017 (28.1%) and 18.8 percentage points higher than 2007 (21.5%). Animation and comedy do not differ from 2017, though the percentage of underrepresented racial/ethnic speaking characters in 2018 is higher than in 2007 across both genres.

Out of 100 movies of 2018, a full 27 featured an underrepresented lead or co lead. Fifteen of these films featured Black actors (10 males, 5 females) as leads/co leads and 4 movies depicted Latinos (2 males, 2 females). Two leads/co leads were Asian (1 male, 1 female), one was MENA (male) and 6 were multiracial (3 males, 3 females).

In 2018, Latinas were the most likely to be hypersexualized – as measured by sexy attire or some nudity -- in comparison to females in 4 other groups (white, Black, Asian, other). Females from other racial/ethnic backgrounds were the most likely to be referenced as attractive, particularly in comparison to females that were Black, Asian, or Latina. There were no meaningful differences across the three hypersexualization indicators by race/ethnicity for male characters.

Behind the Camera. Fifteen directors (13.4%) in 2018 were Black, with 14 males and 1 female. 2018 represents a historic high in hiring Black directors. This is primarily accounted for by the fact that Sony hired 4 Black directors to helm top motion pictures in 2018. Over the 12 year sample, only 79 (5.9%) of 1,335 top jobs were held by Black directors.

Movies with Black directors filled 44.5% of all on screen speaking or named roles with Black actors. When non-Black directors were attached, the percentage of Black characters on screen drops to 11.3%.

Black directors filled 15.7% of all speaking roles in their films with Black girls/women. Only 3.6% of speaking or named characters were Black girls and women in films with non-Black directors.

Of the 112 directors of 2018, only 4 were Asian. This is only 3.6% of the entire sample of directors working across the 100 top fictional films. None of the 2018 directors were Asian women. No over time changes have been observed from 2007 to 2018. Only 3 jobs have been allotted to Asian female directors over the 12 years evaluated.

Only 3 directors were Latino and 4 MENA across the 100 top films of 2018.

Lesbian, Gay, Bisexual & Transgender Characters

In 2018, a total of 4,387 characters were assessed for apparent sexuality. Fifty-eight characters or 1.3% of speaking/named roles were filled with LGB portrayals. Seventeen were lesbian, 33 were gay, and 8 were bisexual (males=4, females=4). Not one transgender speaking character was depicted on screen across the 100 top movies of 2018.

Over time, the number of LGB characters on screen has changed but not the percentage. In 2018, a full 58 LGB characters were shown on screen which was substantially higher than in 2017 (31 LGB characters) or 2014 (21 LGB characters). The gains were for lesbian and gay characters but not bisexual characters.

Focusing on leading characters, 2 of the 100 top-grossing films of 2018 featured a protagonist from the LGBTQ community.

The number of films erasing LGB characters has decreased. In 2018, 76 movies were devoid of LGB characters whereas 81 movies in 2017 and 86 movies in 2014 did. Eighty-nine movies were devoid of even one female LGBT character.

In terms of transgender characters, only 1 depiction has occurred across the 500 top-grossing films from 2014-2018.

Only 36.2% of LGB characters were female and 63.8% were male in the top films of 2018. Nearly two-thirds were white, 19% Black, 5.2% Latino, 10.3% Asian, and 1.7% multiracial.

Only 6 LGB characters across the 100 top films of 2018 were shown as parents (4 males, 2 female). Only one was from an underrepresented racial/ethnic group. Only 13 LGB characters were depicted in a romantic relationship, with 9 female and 4 male. Ten of these characters were white, 2 Black and 1 Asian.

Characters with Disabilities

Across the 4,445 characters in the analysis, 1.6% were shown with a disability. This percentage is a 4-year low.

Over half of the films (58) evaluated in 2018 were missing a character with a disability—a four-year high. A total of 83 films were missing female characters with disabilities. This is an increase from 2017 (+5 films), but on par with 2015. No films featured proportional representation of characters with disabilities when compared to the U.S. population.

Nearly three-quarters of characters with disabilities were male (72.5%) and 27.5% were female. Most characters with disabilities were white (63.1%), while 36.9% were from underrepresented racial/ethnic groups. Just 2 characters with disabilities were LGB.

Examining leading characters, a total of 9 films had a lead or co lead character with a disability. These individuals experienced depression, dyslexia, disfigurement, blindness, heart conditions, HIV/AIDS, or missing limbs.

Three distinct domains of disability were evaluated, based on the U.S. Census. Over half of characters experienced a disability in the physical domain (55.1%), 30.4% of characters had a disability in the cognitive domain, and 27.5% of characters were shown with a communicative disability. As a character could experience a disability in more than one domain, the percentages do not total to 100%.

Solutions for Change

The researchers identified solutions regarding expanding inclusion in leading roles, adding female characters, adopting casting processes that overcome implicit bias and account for the presence of underrepresented individuals across geographic locations. Behind the camera, the authors offer the suggestion that studios hire female directors more than once, and uncouple the link between a lead character's identity and that of the film director to increase opportunities for more women and underrepresented directors to work.

Inequality in 1,200 Popular Films:
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Every year, the USC Annenberg Inclusion Initiative assesses the 100 top fictional movies at the U.S. box office for on screen portrayals of gender, race/ethnicity, LGBTQ and disability.[1] All independent speaking or named characters were evaluated, from those driving the action as protagonists to tertiary characters only saying a single word.[2] Our approach is intersectional and to date we have assessed 53,178 speaking characters across 1,200 movies. This study is clearly the most comprehensive longitudinal analysis of inclusion in fictional feature films to date.

This report is comprised of five major sections. The first focuses on gender, examining the prevalence of males and females on screen across the 1,200 top fictional films from 2007 to 2018. The second section assesses race/ethnicity, looking at whether representation has changed given the popularity of films like *Black Panther, Coco*, and *Crazy Rich Asians.* The third and fourth areas address the depiction of the LGBTQ community as well as characters with disabilities. Finally, the last section focuses on the way forward addressing patterns of inequality in film by outlining solutions for change.

For all of our analyses below, we first report on 2018 findings and then compare those results to 2017. On certain measures, we assess how 2018 was different from 2007 to see if any notable changes have emerged over time. Only statistically significant ($p < .05$) and meaningful differences of 5 percentage points or higher were noted below to avoid making noise about trivial deviations of 1-2%.

Gender

A full 4,422 speaking or named characters appeared across the 100 top fictional films of 2018 (see Table 1).[3] Only 33.1% (*n*=1,464) of all speaking or named characters were girls/women. This translated into a gender ratio of 2 males on screen to every 1 female. The percentage of girls/women on screen in 2018 did not deviate meaningfully from the percentage in 2017 (31.8% female) or 2007 (29.9%). It must be noted that 2018 was 5 percentage points greater than 2014. Despite this one difference, it is still prudent to conclude that there has been no meaningful and consistent change in the 12 years evaluated.

The number of movies with gender-balanced casts was also examined. A gender-balanced movie occurred when 45-54.9% of the cast was female. As shown in Table 1, only 9% of the movies in 2018 had gender-balanced casts. The percentage of gender-balanced casts was down 10 percentage points from 2017 and 3 percentage points from 2007. Despite being roughly 50% of the movie buying audience and half of the U.S. population, girls and women were still vastly underrepresented in 2018.[4]

Table 1
Prevalence of Female Characters On Screen by Year: 2007 to 2018

Year	% of Female Characters	% of Balanced Casts	Ratio of Males to Females	Total # of Characters	Total # of Films
2007	29.9%	12%	2.35 to 1	4,379	100
2008	32.8%	15%	2.05 to 1	4,370	100
2009	32.8%	17%	2.05 to 1	4,342	100
2010	30.3%	4%	2.30 to 1	4,153	100
2011	31.2%	12%	2.21 to 1	4,508	100
2012	28.4%	6%	2.51 to 1	4,475	100
2013	29.2%	16%	2.43 to 1	4,506	100
2014	28.1%	9%	2.55 to 1	4,610	100
2015	31.4%	18%	2.19 to 1	4,370	100
2016	31.5%	11%	2.18 to 1	4,590	100
2017	31.8%	19%	2.15 to 1	4,453	100
2018	33.1%	9%	2.02 to 1	4,422	100
Total	30.9%	12.3%	2.24 to 1	53,178	1,200

Note: Each year a total of 100 movies were evaluated. In 2007 and 2009, two movies were released as double features bringing the total sample size to 101 for those years.

We also assessed whether the gender of all speaking characters varied by rating (PG, PG-13, R) or genre (Action/Adventure, Animation, Comedy). In terms of rating, no significant differences emerged.[5] Just under a third (32.5%) of all speaking characters in PG-rated films were females which was similar to the percentage in PG-13 rated movies (34.4%) and R-rated films (31.7%).

Genre differences were observed by gender, however.[6] As shown in Table 2, comedy (37.5% females) was more likely in 2018 to depict girls/women on screen than animation (31.3%) or action/adventure (29%). Over time, three additional patterns emerged. The percentage of females in action/adventure movies was higher in 2018 than 2017 or 2007. The percentage of females in animation was no different in 2018 than in 2017. However, the percentage of animated girls/women 2018 was higher than in 2007. Finally, the percentage of females in comedy was lower in 2018 than in 2017 but is no different than 2007.

Table 2
Prevalence of Female Characters On Screen by Genre and Year: 2007-2018

Year	% of Female Characters in Action/Adventure	% of Female Characters in Animation	% of Female Characters in Comedy
2007	20%	20.9%	36%
2008	21.6%	26.9%	40.2%
2009	21.6%	30.8%	39%
2010	23.5%	30.7%	35.6%
2011	25%	23.7%	37.2%
2012	22.7%	27.5%	36%
2013	23.9%	24.6%	36.5%
2014	21.7%	23.3%	32%
2015	25.6%	26.8%	36.5%
2016	23.3%	30.8%	40.8%
2017	24.5%	30.7%	42.9%
2018	29%	31.3%	37.5%

Note: The percentage of males can be found by subtracting the percentage of females from 100%.

Moving from the gender of all speaking characters, we now examine the distribution of gender in films with leads/co leads or ensemble casts. In 2018, a total of 89 films had a lead or co lead driving the action and 11 movies were vehicles for ensemble storylines.

Of the films with a lead or co lead, 50 depicted males only and 39 featured a female lead or co lead advancing the plot. It must be noted that the movies with a female lead or co lead could also feature a male in one of those roles, though this happens infrequently every year. The number of female leads/co leads was significantly higher in 2018 (39 movies) than in 2017 (33 movies) and almost double the number of films in 2007 (20 movies)!

Table 3
Leads/Co Leads in Films by Gender, Underrepresented Status, & Age: 2018

Attribute of Leading Character	Males	Females
# of films w/lead or co lead	50	39
# of films w/UR lead or co lead	16	11
# of films w/lead or co lead 45 yrs of age or older	24	11
# of films w/UR lead or co lead 45 yrs of age or older	6	4

Note: Films with a female lead, co lead, or both appear in the "Females" column. For determination of race/ethnicity and age, information pertaining to the *actor* not the character was utilized. Cells in the table refer to the number of movies that have the characteristic present.

Turning to underrepresented leads/co leads, 11 movies featured a girl or woman of color. While this number was not on par with their male counterparts in 2018 (16 movies), it was nearly three times higher than what was observed in 2017 (4 films). Overall, a full 27% of the 100 top films featured a person of color driving the plot. This is higher than 2017 (21 movies), but still 12.6 percentage points below U.S. Census (39.6%).[7]

The age of leads/co leads has also changed. Eleven of the 100 top movies of 2018 featured a female 45 years of age or older at the time of theatrical release. While this was over twice as many as 2017 (5 movies), it was less than half of the movies that featured a male 45 years of age or older in 2018 (24 movies). Out of the 100 top films of 2018, only 4 featured a woman of color 45 years of age or older. Two of these films starred Taraji P. Henson, while the remaining two were vehicles for Jennifer Lopez and Gabrielle Union. Only 6 of the 100 top films of 2018 depicted an underrepresented male 45 years of age or older.

Table 4
Ensemble Casts by Gender, Underrepresented Status, & Age: 2018

Attribute of Leading Character	Males	Females	Total
% of characters in an ensemble cast	58.5% (*n*=24)	41.5% (*n*=17)	100% (*n*=41)
% of characters that are UR in an ensemble cast	12.5% (*n*=3)	11.8% (*n*=2)	12.2% (*n*=5)
% of characters 45 yrs of age or older in an ensemble cast	37.5% (*n*=9)	52.9% (*n*=9)	43.9% (*n*=18)
% of characters UR and age 45 or older in an ensemble cast	4.2% (*n*=1)	5.9% (*n*=1)	4.9% (*n*=2)

Note: The analyses in Table 4 refer to the number and percentage of male and female characters in ensemble films. Columns do not total to 100%, as there was overlap across certain rows. The findings should be interpreted within cell and column. For instance, 58.5% of all characters (*n*=41) in an ensemble cast were male.

Turning to stories driven by ensemble casts, 41 characters across 11 movies were credited as ensemble leads by our approach to coding (see Table 4). A full 41.5% of those actors were female, which was nearly identical to the percentage across the top ensemble movies of 2017 (42.9% female). There were *fewer* ensemble leads from underrepresented racial/ethnic groups in 2018 (12.2%, *n*=5) than in 2017 (30.9%, *n*=13) but *more* 45 years of age or older (2018=43.9%, *n*=18; 2017=33.3%, *n*=14). The percentage and number of ensemble leads 45 years of age or older from underrepresented groups was also down (2018=4.9%, *n*=2; 2017=19%, *n*=8).

In total, this section reveals two major trends. One, the percentage of female speaking characters has not changed over time. Two, leading/co leading roles for females, particularly women of color and those 45 years of age or older has increased significantly from 2017 to 2018. This is the first major sign of change across the 12 years of conducting this report.

On Screen Portrayal

We looked at two major factors in this report pertaining to stereotyping: age and sexualization. Each character was coded into one of 4 groupings: 0-12, 13-20, 21-39, 40 and older. Then, the relationship between character gender and character age was evaluated.[8] Of those characters that could be evaluated for age, a full 34.4% were female. As shown in Table 5, approximately half of all teens were female (48%) whereas 39.1% of 0-12 year olds and 39.9% of 21-39 year olds. The group that continued to be the most underrepresented were women 40 years and above. Within this age group, women only received 25% of all speaking or named roles. As shown in Table 6, the percentage of females 40 years of age or above has not changed over the 12-year time frame of the study.[9]

Table 5
Character Gender by Age in Top Grossing Films: 2018

Gender	Children 0-12 yrs	Teens 13-20 yrs	Young Adult 21-39 yrs	Adults 40 yrs or Older
Males	60.9%	52%	60.1%	75%
Females	39.1%	48%	39.9%	25%
Ratio	1.55 to 1	1.08 to 1	1.51 to 1	3.01 to 1

Note: Column percentages sum to 100%.

Table 6
Gender of Characters 40 years of Age and Older: 2007 to 2018

Gender	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
% of males	77.9%	72.8%	75.6%	78.2%	78.2%	79.2%	78.4%	79.3%	75.4%	74.3%	75.4%	75%
% of females	22.1%	27.2%	24.4%	21.8%	21.8 %	20.8%	21.6%	20.7%	24.6%	25.7%	24.6%	25%

Note: The analysis in Table 6 includes only characters 40 years of age and older.

Focusing on sexualization, three indicators (sexually revealing clothing, some nudity, attractiveness) have been evaluated over time. The aim each year is to see how these three indicators vary with gender.[10] As shown in Figure 1, females were far more likely than their male counterparts in 2018 to be shown in sexually revealing attire and with some nudity. Girls/women were also more likely than boys/men to be referenced as attractive by other characters. These trends are problematic, as objectifying portrayals can contribute to a series of negative effects among some girls and women.[11]

Figure 1
Character Gender by Sexualization Indicators: 2018
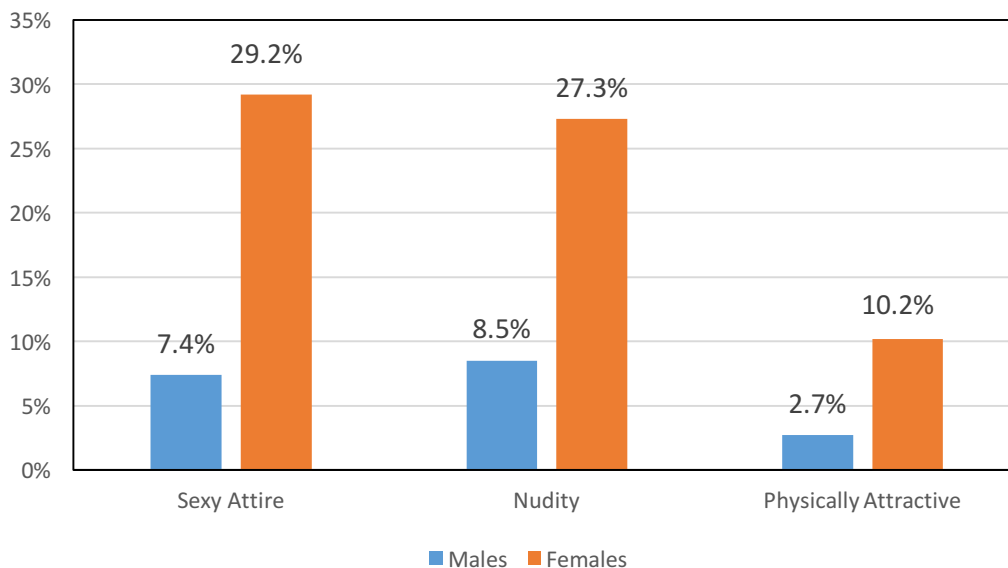
Has the amount of sexualization on screen changed over time? As shown in Table 7 and 8, the percentage of males or females depicted in sexually revealing clothing, partially naked or referenced as attractive has not changed from 2017 to 2018.[12] Nor has there been meaningful movement since 2007 for male characters across these three variables. It must be noted that 2013 was the high for sexy attire and nudity for male characters.

A slightly different picture emerged for females over time, however. While there has been no change in depicting females in sexually revealing clothing from 2007 to 2018, the percentage of females portrayed with some nudity has increased across 12 years. The exact opposite pattern was observed for physical beauty, however.

Table 7
Sexualization of Male Characters On Screen: 2007 to 2018

Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
% in sexy attire	4.6%	5.1%	4.7%	7.2%	6.8%	7%	9.7%	8%	7.7%	5.7%	7.5%	7.4%
% w/some nudity	6.6%	8.2%	7.4%	9.4%	8.5%	9.4%	11.7%	9.1%	9.5%	9.2%	9.6%	8.5%
% that were attractive	5.4%	4.1%	2.5%	3.8%	2.9%	N/A	2.4%	3.1%	3.6%	3.1%	3.9%	2.7%

Note: Cells for each measure showcase the proportion of males across 100 films. The percentage of male characters for whom the attribute was absent can be found by subtracting from 100%. In 2012, the attractiveness of characters was not measured (N/A=not applicable).

Table 8
Sexualization of Female Characters On Screen: 2007 to 2018

Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
% in sexy attire	27%	25.7%	25.8%	33.8%	35.8%	31.5%	30.2%	27.9%	30.2%	25.8%	28.4%	29.2%
% w/some nudity	21.8%	23.7%	23.6%	30.8%	34.1%	30.9%	29.5%	26.4%	29%	25.6%	25.4%	27.3%
% attractive	18.5%	15.1%	10.9%	14.7%	14.7%	N/A	13.2%	12.6%	12%	10.7%	11%	10.2%

Note: Cells for each measure showcase the proportion of females across 100 films. The percentage of female characters for whom the attribute was absent can be found by subtracting from 100%. In 2012, the attractiveness of characters was not measured (N/A=not applicable).

Given that females were far more objectified than males, we took a deeper dive into the sexualization patterns by age. Here, the extent to which teenage female characters were objectified on screen was examined in comparison to their young adult (21-39 years) and middle aged (40-64 years) female counterparts.[13] Table 9 reveals that teenage females were just as likely to be sexualized and referenced as attractive by other characters as females 21-39 years of age. Middle age women were the least likely to be shown in a sexualized light, however.

Table 9
Female Character Sexualization by Age: 2018

Measure	13-20 year olds	21-39 year olds	40-64 year olds
% in sexy attire	37.3%	35.6%	25.2%
% w/some nudity	33.3%	33.3%	23.3%
% referenced attractive	13.9%	12.2%	7.2%

Note: Cells for each measure showcase the proportion of females within each age group across 100 films. The percentage of female characters for whom the attribute was absent can be found by subtracting from 100%.

The over time trends for these three age groups on females' sexy revealing clothing and some nudity are shown in Figures 2 and 3.[14] In terms of sexy attire, the percentages observed in 2018 were no different than in 2017 or in 2007 for females 13-20 years of age or those 21-39 years of age. In 2018, women 40-64 years of age were more likely to be shown in sexy clothing than in 2007. Looking at the patterns for some nudity, 2018 does not differ from 2017. While there was no difference between 2018 and 2007 for females 21-39 years of age on this measure, notable increases were observed over time for the two other age groups (i.e., 13-20 years of age, 40-64 years of age).

Figure 2
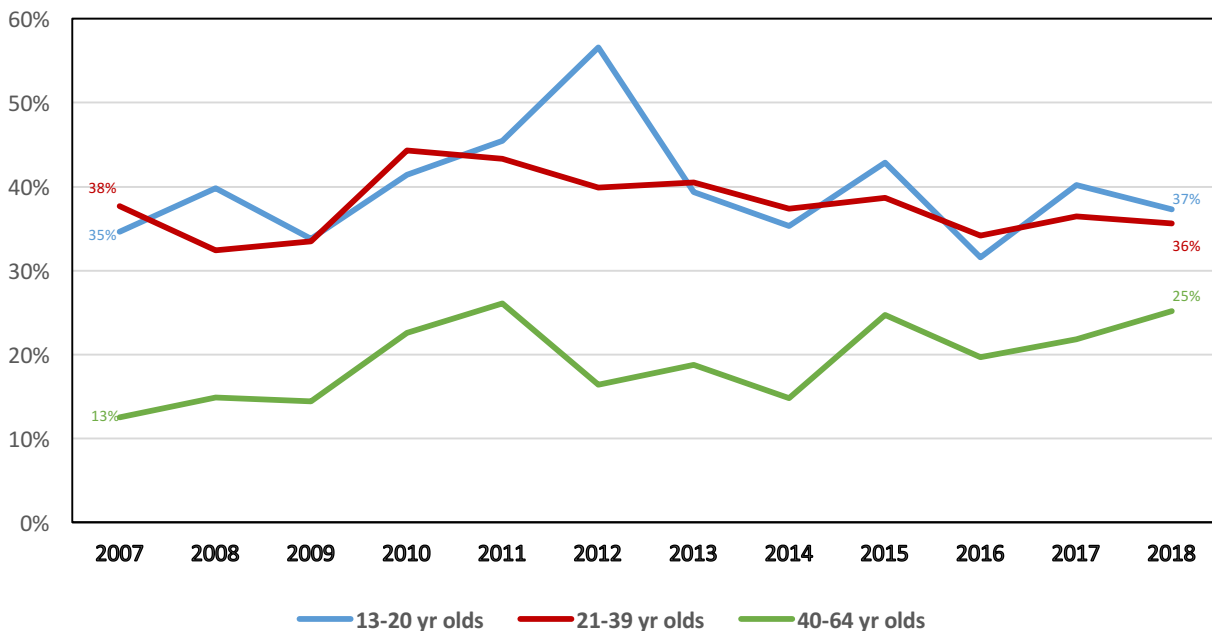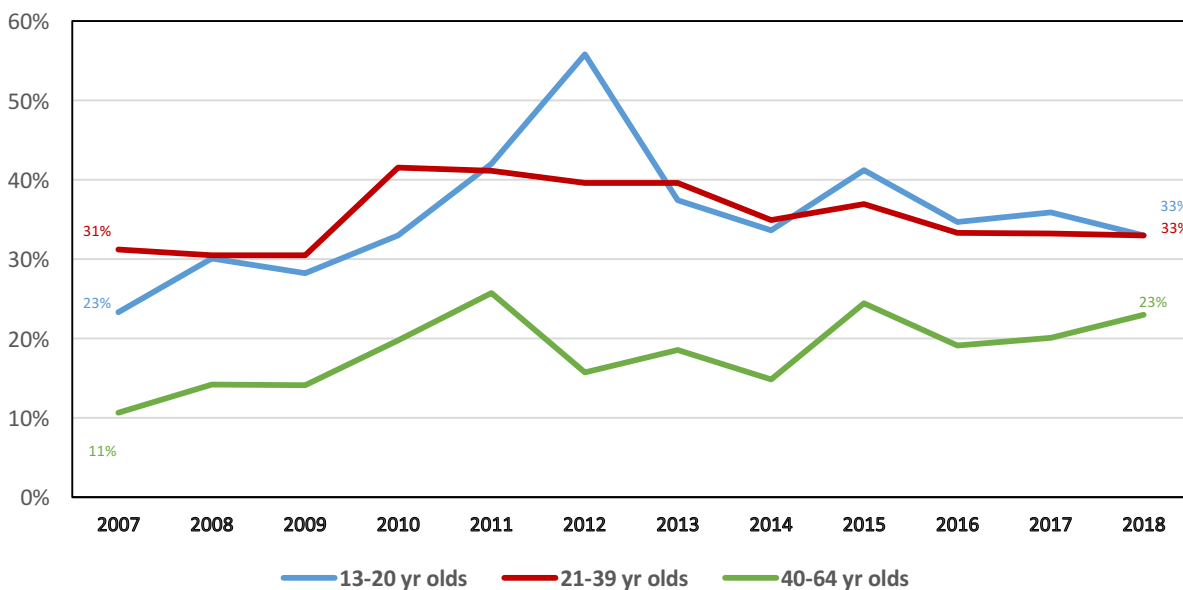Percentages of Females in Sexy Attire by Age: 2007-2018

Figure 3
Percentages of Females with Some Nudity by Age: 2007-2018

In sum, the stereotypical pattern for females in Hollywood was the same in 2018 as many of the other years we have conducted this study. Females were valued on screen for being young and sexy. As such, there is a still a sell by date on female actors around 40 years of age. To understand the reason for these trends, one only has to look at who is calling the shots behind the camera across the 100 top-grossing films. This is the next section of the report.

Behind the Camera

A total of 1,566 content creators (e.g., directors, writers, producers) were employed behind the camera across the 100 top movies of 2018 (see Table 10). Over three quarters (81.5%, *n*=1,276) of these above the line jobs were filled with males and 18.5% were filled with females (*n*=290). This translates into a gender ratio of 4.4 males to every 1 female.

Table 10
Content Creators by Gender: 2018

Position	Males	Females	Gender Ratio
Directors	95.5% (*n*=107)	4.5% (*n*=5)	21.4 to 1
Writers	85.6% (*n*=273)	14.4% (*n*=46)	5.9 to 1
Producers	78.9% (*n*=896)	21.1% (*n*=239)	3.8 to 1
Total	81.5% (*n*=1,276)	18.5% (*n*=290)	4.4 to 1

Focusing specifically on directors, 112 helmers were hired across the 100 top films of 2018. A full 107 jobs were filled by males and 5 by females. Given this pronounced imbalance, it is not surprising that the gender ratio was 21.4 males to every 1 female. Rounding out above the line jobs, only 14.4% of writers and 21.1% of producers were women (see Table 10).

Table 11
Female Directors: 2007 to 2018

Measure	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
# of female dirs	3	9	4	3	4	5	2	2	8	5	8	5
% of female dirs	2.7%	8%	3.6%	2.75%	3.7%	4.1%	1.9%	1.9%	7.5%	4.2%	7.3%	4.5%
Total	112	112	111	109	108	121	107	107	107	120	109	112

Over time, there has not been any change in the hiring of female directors across the 100 top fictional films (see Table 11). A total of 4.3% of all directors were women (58 out of 1,335). The woman who has helmed the most movies in the sample directed 4 films, followed by one woman who directed 3. Six women across the sample each have directed 2 films. Given that some female directors work more than once, the total number of individual women hired across the 1,200 movies is 47. The total number of unique men is 657. Clearly, the studios and production companies are doing little to fix this historic and discriminatory approach to hiring in Hollywood.

The only number lower than female directors in this report is female composers. In 2018, 3 female composers were attached to the 100 top fictional films. None of the female composers were hired by female directors, however. Across the 12-year sample, only 1.4% (19 out of 1,327)

of all composers were women. This translates into a gender ratio of 68.8 males to every 1 female.

Table 12
Female Composers: 2007 to 2018

Measures	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
# of female comps	0	2	2	2	1	2	2	1	1	2	1	3
% of female comps	0	1.8%	1.8%	1.7%	<1%	1.9%	1.8%	<1%	<1%	1.7%	<1%	2.75%
Total	107	108	109	115	109	105	114	105	114	121	111	109

Next, we examined how employment practices behind the camera related to on screen portrayals. More directly, the following question was posed: Is director gender associated with the gender composition of the cast on screen?[15] In 2018, the answer is yes. For films with male direction only, the percentage of female speaking characters on screen was 32.5%. When a female was attached to direct, that number jumped to 47.6% of all speaking characters - a 15.1 percentage point difference.

Figure 4
Percentage of Female Characters On Screen by Director Gender: 2018
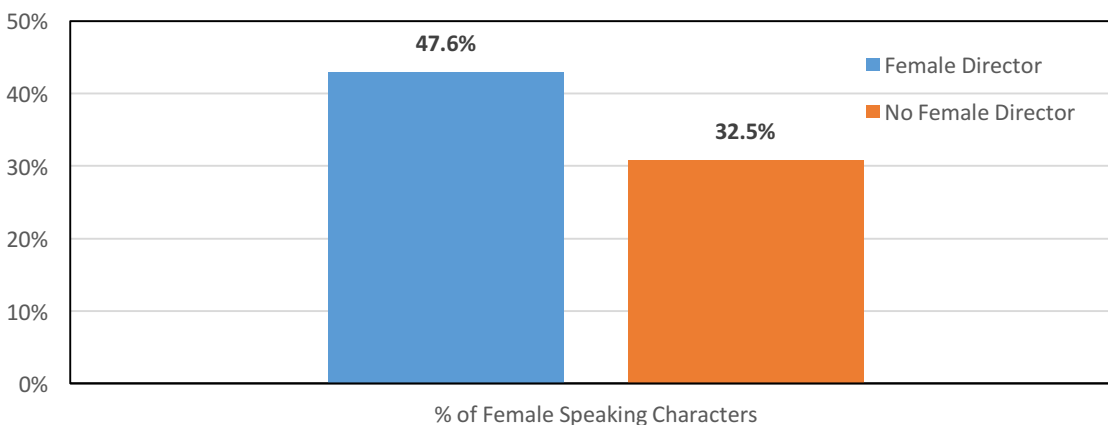
Overall, the behind the camera findings were similar to every other year we have conducted this study. Despite legal pressure, activism, and bankability, the needle on Hollywood's hiring practices in top leadership roles behind the camera has failed to budge.

Race/Ethnicity

The second section of the report highlights race/ethnicity of all speaking characters as well as leads/co leads and ensemble casts. The number of films that featured proportional representation as well as erasure of specific groups was also explored. Finally, we looked behind the camera for an examination of race/ethnicity in the director's chair.

On Screen (Prevalence & Portrayal)

A total of 3,895 speaking or named characters had an ascertainable race/ethnicity.[16] Of those, a full 63.7% were white, 16.9% Black, 5.3% Latino, 8.2% Asian, 1.5% Middle Eastern/North African (i.e., MENA), <1% American Indian/Alaska Native, <1% Native Hawaiian/Pacific Islander, and 4% multiracial/other. In total, 36.3% of speaking characters were from underrepresented racial/ethnic groups which approximates U.S. Census (39.6%).

Has race/ethnicity on screen changed over time? (see Table 13). To answer this question, we examined five groups over the 12-year sample. The "other" category constitutes all groups (i.e., American Indian/Alaska Native, Native Hawaiian/Pacific Islander, MENA, Multiracial/Other) with very few characters shown on screen. The percentage of white characters has decreased significantly in 2018 (63.7%) in comparison to 2017 (70.7%) and 2007 (77.6%). Black characters were at a 12-year high in 2018, though the percentage was just shy of a 5 percentage point difference (+4.8) between 2018 and 2017. A 3.9 percentage point difference was observed from 2007 to 2018. The only other group showing gains were Asian characters, though the differences from 2017 to 2018 or from 2007 to 2018 fell short of practical significance (>5 percentage points).

Table 13
Prevalence of Character Race/Ethnicity On Screen by Year: 2007-2018

Year	White	Black	Latino	Asian	Other
2007	77.6%	13.0%	3.3%	3.4%	2.5%
2008	71.2%	13.2%	4.9%	7.1%	3.5%
2009	76.2%	14.7%	2.8%	4.7%	1.5%
2010	77.6%	10.3%	3.9%	5.0%	3.3%
2011	77.1%	9.1%	5.9%	4.1%	3.8%
2012	76.3%	10.8%	4.2%	5.0%	3.6%
2013	74.1%	14.1%	4.9%	4.4%	2.5%
2014	73.1%	12.5%	4.9%	5.3%	4.2%
2015	73.7%	12.2%	5.3%	3.9%	4.9%
2016	70.8%	13.5%	3.1%	5.6%	6.9%
2017	70.7%	12.1%	6.2%	4.8%	6.3%
2018	63.7%	16.9%	5.3%	8.2%	5.9%

Note: Characters coded as MENA, American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and Multiracial/Other were included in the Other column. Percentages sum to 100% in each row, with deviation due to rounding.

The above analyses represent overall trends in the portrayal of different groups by race/ethnicity. Now, two additional ways to think about representation are presented. First, we assessed the total number of films that erased or failed to depict members of particular groups. Second, we examined the percentage of films that featured proportional representation of characters vis a vis U.S. Census.

Table 14
Films Focusing on Black, Asian, & Latino Characters: 2015-2018

Measure	Black Characters				Latino Characters				Asian Characters			
	2015	2016	2017	2018	2015	2016	2017	2018	2015	2016	2017	2018
# w/out chars. from group	17	25	20	12	40	54	43	47	49	44	37	32
# w/prop. representation	10	19	19	18	2	1	0	2	18	21	26	20
U.S. Census	13.4%				18.3%				5.9%			
Total Films Per Year	100				100				100			

Note: In 2018 1 film and in 2017 2 films did not include any characters for whom a racial/ethnic background could be ascertained. In 2016, a total of 6 films and in 2015 a total of 0 films met this criterion.

Table 14 reveals a few patterns. First, there is no consistent pattern on invisibility. Films were less likely to erase Black and Asian characters from 2015 to 2018. The erasure of Latinos has increased from 40 films in 2015 to 47 films in 2018. Though not featured in Table 14, the number of 2018 films erasing the remaining racial/ethnic groups were as follows: American Indian/Alaska Native (99 movies), Native Hawaiian/Pacific Islander (93 movies), MENA (78 movies), and multiracial/other (31 movies).

Second, movies with proportional representation have stayed roughly the same across groups in Table 14. The Latino community only sees 1-2 movies per year with roughly 18% of the cast matching U.S. population estimates. Yet roughly a fifth of all movies yearly featured proportional representation of Black and Asian characters. Among other groups, proportional representation is as follows: multiracial/other (23 films); MENA (10 films);[17] American Indian/Alaska Native (1 film); Native Hawaiian/Pacific Islander (1 film). These latter findings should be interpreted cautiously, as 1 or 2 portrayals in a movie may facilitate achieving proportional representation.

Table 15
Epidemic of Invisibility Facing Females by Race/Ethnicity: 2015-2018

Year	# of Films w/no White Females	# of Films w/no Black Females	# of Films w/no Latino Females	# of Films w/no Asian Females
2015	3	48	65	70
2016	11	47	72	66
2017	7	43	64	65
2018	4	33	70	54

Note: In 2018, 1 movie did not include any characters with a discernable race/ethnicity. In 2017, 2 films did not include any characters for whom a racial/ethnic background could be ascertained. In 2016, a total of 6 films and in 2015, a total of 0 films met this criterion.

The above analyses focused on all speaking characters. Now, we turn our attention to the number of films erasing *females* from different racial/ethnic groups. As shown in Table 15, erasure has decreased, particularly in films depicting Black and Asian girls/women on screen. However, 70 of the 100 top movies of 2018 did not feature one speaking or named Latina in the plot. Erasure in 2018 was higher than in 2017 for Latinas and does not differ from 2015. As a point of comparison, only 4 movies were devoid of white girls/women speaking or being named on screen. Focusing on 2018 only, 99 movies erased American Indian/Alaska Native females, 97 of Native Hawaiian/Pacific Islander girls/women, 92 MENA females, and 51 girls/women from multiracial/other groups.

The above measures focus on prevalence overall. But, frequency counts tend to vary by other factors such as a story's genre or the character's gender. To examine genre, the racial/ethnic variable was first collapsed into two categories: white vs. all underrepresented groups. Then, the association of this binary variable by genre grouping was examined (action/adventure, animation, comedy).[18]

A notable finding emerges in Table 16. The percentage of underrepresented characters was at a 12-year high in action/adventure movies. 2018 is 12.2 percentage points higher for underrepresented characters than 2017 and 18.8 percentage points higher than 2007. Animation and comedy do not differ from 2017, though the percentage of underrepresented racial/ethnic groups in 2018 is higher than in 2007 across both genres.

Gender was significantly related to characters' underrepresented status.[19] Asian and female characters from other racial/ethnic groups were more likely to be shown on screen than females that were white, Black, or Latina. It is important to note that these are in column percentages, and that the sheer number of characters from Black, Latino, Asian, and other backgrounds is substantially smaller than white characters.

Table 16
Prevalence of Underrepresented Characters On Screen by Film Genre by Year: 2007-2018

Year	% of UR characters Action/Adventure	% of UR characters Animation	% of UR characters Comedy
2007	21.5%	8.1%	23.1%
2008	32.1%	10.5%	27.8%
2009	23.4%	12.3%	24.7%
2010	30%	1.5%	23.4%
2011	25.2%	27.5%	26.9%
2012	29.4%	5.3%	24.1%
2013	26.9%	12.4%	27.6%
2014	24.9%	33.5%	27.2%
2015	28.9%	13.2%	27.3%
2016	27.3%	48.5%	32.1%
2017	28.1%	34%	35.6%
2018	40.3%	35.6%	38%

Note: The percentage of Caucasian speaking characters can be computed by subtracting each cell from 100%.

Table 17
Character Race/Ethnicity by Gender in Top-Grossing Films: 2018

Gender	White	Black	Latino	Asian	Other
% of males	67.9%	66.4%	67.1%	55.5%	56.7%
% of females	32.1%	33.6%	32.9%	44.5%	43.3%
Ratio	2.12 to 1	1.98 to 1	2.0 to 1	1.25 to 1	1.31 to 1

The above analyses focused on all speaking characters. Now, we turn our attention to leads and co leads as well as actors driving the story in ensemble casts. For this analysis, the actor's race/ethnicity was utilized rather than the character. Out of 100 movies of 2018, a full 27 featured an underrepresented lead or co lead. Fifteen of these films featured Black actors (10 males, 5 females) as leads/co leads and 4 movies depicted Latinos (2 males, 2 females). Two leads/co leads were Asian (1 male, 1 female), one was MENA (male) and 6 were multiracial (3 males, 3 females). Summing across, 11 movies featured a female lead from an underrepresented racial/ethnic background. This is roughly three times higher than the number in 2017 or 2016.

Out of the 41 actors driving the 11 ensemble films, only 5 roles (12.2%) were filled with underrepresented actors. This number and percentage in 2018 was significantly below 2017 (30.9%, *n*=13). In 2018, three of the underrepresented ensemble actors were male and 2 were female. Of the 5 actors, 3 were Black, 1 Asian and 1 Latino.

Besides prevalence, the hypersexualization of characters by race/ethnicity was evaluated.[20] Given pronounced gender differences on the hypersexualization measures, the analyses for males and females were computed separately. The following were trends observed, as none of the results were statistically significant.

As shown in Table 18, Latinas were the most likely to be hypersexualized – as measured by sexy attire or some nudity -- in comparison to all other groups (white, Black, Asian, other). Females from other racial/ethnic backgrounds were the most likely to be referenced as attractive, particularly in comparison to females that were Black, Asian, or Latina. As Table 19 shows, there were no meaningful differences across the three hypersexualization indicators by race/ethnicity for male characters.

Table 18
Sexualization of Female Characters by Race/Ethnicity On Screen: 2018

Measures	White	Black	Latina	Asian	Other
% in sexy attire	29.1%	30.3%	38.2%	26.1%	28%
% of w/some nudity	27.5%	28.5%	33.8%	23.9%	25%
% referenced as attractive	11.9%	9%	5.9%	7.7%	14%

Note: Each cell reflects the percentage of females in each racial/ethnic group across 100 films who were depicted with the attribute. To determine the percentage of female characters who were not depicted with the attribute, subtract the cell percentage from 100%.

Table 19
Sexualization of Male Characters by Race/Ethnicity On Screen: 2018

Measures	White	Black	Latino	Asian	Other
% in sexy attire	7.1%	8.2%	7.9%	9.1%	9.2%
% of w/some nudity	8.3%	9.2%	7.9%	11.9%	9.9%
% referenced as attractive	3%	3%	4.3%	2.3%	2.3%

Note: Each cell reflects the percentage of males in each racial/ethnic group across 100 films who were depicted with the attribute. To determine the percentage of male characters who were not depicted with the attribute, subtract the cell percentage from 100%.

Overall, a few notable trends emerged across the on screen race/ethnicity section. Historic highs were observed in the percentage of Black and Asian speaking characters on screen as well as the number of women of color leading or co leading movies across the 100 top films of 2018. Little to no progress was observed for all other underrepresented racial/ethnic groups and white characters continue to be on the decline. Finally, action/adventure movies in 2018 featured more underrepresented characters than any other year examined across this 12-year longitudinal study.

Behind the Camera

The number and percentage of directors from underrepresented racial/ethnic groups are evaluated each year. This year, we have expanded our focus to examine directors from four underrepresented backgrounds: Black, Asian, Latino, and MENA. A total of 112 directors were hired across 100 top fictional films. Directors that identified with more than one underrepresented group were counted in all categories they represent.

Table 20
Black Directors by Year: 2007-2018

Black Directors	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
% male dirs	7.1% (*n*=8)	4.5% (*n*=5)	6.3% (*n*=7)	4.6% (*n*=5)	1.8% (*n*=2)	4.9% (*n*=6)	6.5% (*n*=7)	3.7% (*n*=4)	3.7% (*n*=4)	5.8% (*n*=7)	4.6% (*n*=5)	12.5% (n=14)	5.5% (*n*=74)
% of female dirs	0	1.8% (*n*=2)	0	0	0	0	0	<1% (*n*=1)	0	0	<1% (*n*=1)	<1% (*n*=1)	<1% (*n*=5)
Total	112	112	111	109	108	121	107	107	107	120	109	112	1,335

Fifteen directors in 2018 were Black, with 14 males and 1 female. As shown in Table 20, 2018 represents a historic high in hiring Black directors. This is primarily accounted for by the fact that Sony hired 4 Black directors to helm top motion pictures in 2018.

Figure 5
Percentage of Black Characters by Director Race: 2018

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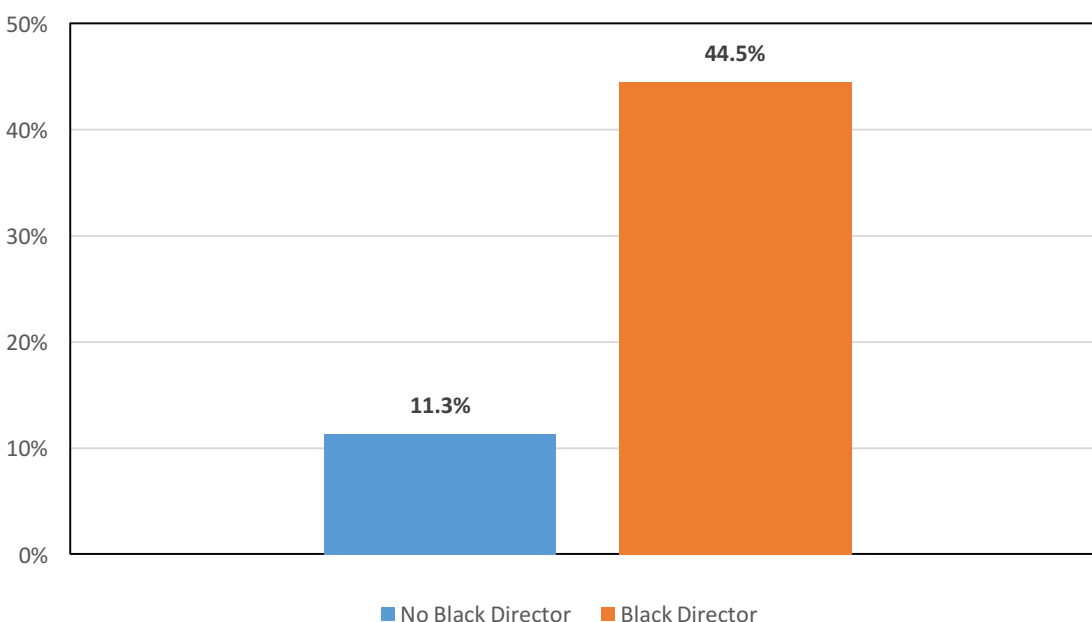
The presence of a Black director (no, yes) was correlated with Black actors on screen.[21] As shown in Figure 5, movies with Black directors filled 44.5% of all on screen speaking or named roles with Black actors. When non-Black directors were attached, the percentage on screen drops to 11.3%. Another trend emerges by gender, Black directors filled 15.7% of all speaking roles in their films with Black girls/women. Only 3.6% of speaking or named characters were Black girls and women in films with non-Black directors. Clearly, one of the keys to diversifying on screen content involves hiring males **and** females inclusively behind the camera.

Of the 112 directors of 2018, only 4 were Asian. This is only 3.6% of the entire sample of directors working across the 100 top fictional films. None of the 2018 directors were Asian women. Over time trends are observed in Table 21, which illuminates no changes from 2007 to 2018. Only 3 jobs have been allotted to Asian female directors over the 12 years evaluated. Two of those movies were directed by the same Asian female.

Table 21
Asian Directors by Year: 2007-2018

Asian Directors	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
% of male dirs	2.7% (*n*=3)	1.8% (*n*=2)	<1% (*n*=1)	3.7% (*n*=4)	2.8% (*n*=3)	1.6% (*n*=2)	5.6% (*n*=6)	0	5.6% (*n*=6)	3.3% (*n*=4)	3.7% (*n*=4)	3.6% (*n*=4)	2.9% (*n*=39)
% of female dirs	0	<1% (*n*=1)	0	0	<1% (*n*=1)	0	0	0	0	<1% (*n*=1)	0	0	<1% (*n*=3)
Total	112	112	111	109	108	121	107	107	107	120	109	112	1,335

Similar to female and Black directors, the nature of on screen portrayals was associated with the presence of an Asian helmer.[22] In films without an Asian director, only 6.7% of speaking or named characters on screen in 2018 films were coded as Asian. The percentage jumps to 41.6% when an Asian director was attached. A notable jump was also observed for Asian girls and women on screen. Only 2.6% of all on screen roles were filled with Asian females when the director was not Asian. Over a quarter (27.1%) of all speaking roles were filled with Asian girls/women when an Asian director helmed the story. While these trends are notable, they must be interpreted with caution as they represent the choices of only 4 Asian directors.

The remaining two groups examined were Latino and MENA directors. Only 3 directors were Latino and 4 were MENA across the 100 top films of 2018. One director was Afro-Latino. Two of the Latino directors were international and one was from the U.S. For more information on Latino directors and producers as well as on screen roles, see our recent report: *Latinos in Film*.[23] Our future work seeks to dive more deeply into the representation of MENA actors and above the line crew in the film industry.

Overall, the positive results of this section pertain to the number of Black directors hired across 2018. While this is cause for celebration, all but one of these employment opportunities were given to Black men. Only one woman of color directed a movie across the 100 top films of 2018, which illuminates the problematic nature of hiring decisions in Hollywood. Black and Asian

directors, along with female helmers, were more likely to feature in group members on screen which illuminates one of the most straightforward pathways for changing Hollywood's diversity crisis: hire inclusively behind the camera.

<div align="center">Lesbian, Gay, Bisexual, and Transgender Characters</div>

Since 2014, the prevalence and nature of characters from the LGBTQ community on screen has been investigated. In 2018, a total of 4,387 characters were assessed for apparent sexuality. Fifty-eight characters or 1.3% of speaking/named roles were filled with LGB portrayals. Seventeen were lesbian, 33 were gay, and 8 were bisexual (males=4, females=4). Not one transgender speaking character was depicted on screen across the 100 top movies of 2018.

Over time, the number of LGB characters on screen has changed but not the percentage. In 2018, a full 58 LGB characters were shown on screen which was substantially higher than in 2017 (31 LGB characters) or 2014 (21 LGB characters). As shown in Table 22, the gains were for lesbian and gay characters but not bisexual characters. In terms of transgender characters, only 1 depiction has occurred across the 500 top-grossing films from 2014-2018.

<div align="center">

Table 22
LGBT Portrayals: 2014-2018

</div>

Sexuality	2014	2015	2016	2017	2018
Lesbian	4	7	9	9	17
Gay	12	19	36	16	33
Bisexual	5	5	6	6	8
Transgender	0	1	0	0	0
Total	21	32	51	31	58
% of LGBT characters sample-wide	<1%	<1%	1.1%	<1%	1.3%

Focusing on leading characters, 2 of the 100 top-grossing films of 2018 featured a protagonist from the LGBTQ community. Since 2014, one to two films have depicted an LGB lead. Of the 7 leads, all but one was male and two were underrepresented. In 2015, there was not one lead LGB character across the 100 top movies.

Among ensemble leads, two female characters were bisexual in 2018. The only other bisexual lead in an ensemble film appeared in 2017. All three of these characters were white and one was male.

In terms of invisibility, Table 23 reveals a few notable changes over time. The number of films erasing all LGBT characters in general and females in specific has decreased. In 2018, 76 movies were devoid of LGBT characters whereas 81 movies in 2017 and 86 movies in 2014 did. A somewhat similar trend emerged for females from this community. While these represent steps

in the right direction, it is important to highlight that more than three quarters of the sample erased LGBT characters from storytelling.

Table 23
Roles & Visibility of LGBT Characters: 2014-2018

Measures	2014	2015	2016	2017	2018
% of supporting characters	38.1%	28.1%	45.1%	48.4%	48.3%
% of inconsequential characters	47.6%	71.9%	49%	41.9%	43.1%
# of movies w/no LGBT	86	82	76	81	76
# of movies w/no LGBT females	96	93	91	94	89

Note: Columns do not total to 100%.

The demographic attributes of the LGB characters were evaluated. Only 36.2% of these characters were female and 63.8% were male. Nearly two-thirds were white (*n*=37), 19% Black (*n*=11), 5.2% Latino (*n*=3), 10.3% (n=6) Asian, and 1.7% multiracial (*n*=1). In terms of age, one character was a child (1.7%) and 12 were teens (20.7%). The remaining LGB characters were young adults (21-39 years of age; 56.9%, *n*=33) or middle aged and older (40-64+ years of age; 20.7% *n*=12).

In addition to demographics, the family and romantic lives of LGB characters were explored. Thirty three of the LGB characters in the sample had enough cues to evaluate their parental status. Only 6 were shown as caregivers (4 males, 2 female). Only one was from an underrepresented racial/ethnic group. Focusing on relational status, only 34 of the 58 LGB characters had enough information in the plot to evaluate this measure. Only 13 LGB characters were depicted in a romantic relationship, with 9 female and 4 male. Ten of these characters were white, 2 Black and 1 Asian.

The results in this section demonstrate that some progress has occurred for the LGB community in top films, but more change is needed. While the percentage of LGB characters has not increased over time, there have been numerical gains. Fewer films were missing LGB characters, and LGB females in 2018 than in previous years. However, there were still no Transgender characters depicted in the most popular films of 2018, and three-quarters of the movies studied did not feature a single LGB character. Most depictions of LGB characters are by white males, which fails to show the diverse nature of this community. While celebrating small increases is important, there are key ways in which the LGBTQ community is still left out of popular movies.

Characters with Disabilities

For four consecutive years, the Annenberg Inclusion Initiative has evaluated the prevalence and portrayal of characters with disabilities across top-grossing films. Each year, we apply a definition modeled on the Americans with Disabilities Act (ADA).[24] Supernaturally derived characters (e.g., ghosts, demons) were not evaluated for the presence of a disability, consistent with previous

analyses. Addiction was not considered a disability. Across the 4,445 characters in the analysis, 1.6% were shown with a disability (*n*=69). Table 24 reveals how this figure compares to previous years.

Table 24
Films Focusing on Characters with Disabilities: 2015-2018

Measure	2015	2016	2017	2018
% of characters with disabilities	2.4%	2.7%	2.5%	1.6%
# of films missing characters w/disabilities	45	38	41	58
# of films missing female characters w/disabilities	84	70	78	83
# of films with proportional representation	2	1	2	0
U.S. Census	18.7%			27.2%
Total Films Evaluated	100	100	100	100

Note: Updated U.S. Census information was used to calculate proportional representation for 2018 films.

In terms of invisibility, over half of the films (*n*=58) evaluated in 2018 were missing a character with a disability—a four-year high. A total of 83 films were missing female characters with disabilities. This is an increase from 2017 (+5 films), but on par with 2015. No films featured proportional representation of characters with disabilities when compared to the U.S. population.

Examining leading characters, a total of 9 films had a lead or co lead character with a disability. These individuals experienced depression, dyslexia, disfigurement, blindness, heart conditions, HIV/AIDS, or missing limbs. Male lead/co lead characters (*n*=7) were more likely than female (*n*=2) lead/co lead characters to be featured with a disability. Five films centered on an underrepresented leading character with a disability, and 1 movie showcased the story of an LGBT leading character with a disability. Overall, as shown in Table 25, the trends in 2018 reveal little change from previous years when it comes to central characters with disabilities in film.

Table 25
Lead/Co Lead Characters with Disabilities: 2015-2018

Measure	2015	2016	2017	2018
# of films w/lead or co lead char w/a disability	10	15	14	9
# of films w/male lead or co lead char w/a disability	7	12	10	7
# of films w/female lead or co lead char w/a disability	3	3	4	2
# of films w/UR lead or co lead char w/a disability	0	0	1	5
# of films w/LGBT lead or co lead char w/a disability	0	0	1	1

Leading characters in ensemble casts were also evaluated for the presence of a disability. Two films featured leading characters with disabilities. One was male and one female, both were white, and one was bisexual.

Beyond leading characters, supporting and inconsequential characters were also evaluated. Of the characters with disabilities, 49.3% (*n*=34) were in supporting roles, while 31.9% (*n*=22) were in tertiary roles. These figures represent no change from 2017 (51.8%=supporting, 32.1%=inconsequential), but a decrease from 2015 in the presentation of supporting characters with disabilities (54.3%). Compared to 2015 (32.4%), there was no change in the percentage of inconsequential characters shown with a disability.

Three distinct domains of disability were evaluated, based on the U.S. Census.[25] Over half of characters experienced a disability in the physical domain (55.1%, *n*=38). These characters had mobility issues, were missing limbs, or had severe disfigurement. Nearly one-third (30.4%) of characters had a disability in the cognitive domain, such as depression, anxiety, or PTSD. Finally, 27.5% of characters were shown with a communicative disability, such as blindness or deafness. As a character could experience a disability in more than one domain, the percentages do not total to 100%.

Demographic indicators were also assessed for characters with disabilities (Table 26). Nearly three-quarters of characters with disabilities were male (72.5%, *n*=50) and 27.5% (*n*=19) were female. Most characters with disabilities were white (63.1%, *n*=41), while 36.9% (*n*=24) were from underrepresented racial/ethnic groups. Just 2 characters with disabilities were LGB. Two important over time changes occurred in 2018. First, the percentage of underrepresented characters with disabilities increased (+9.9 percentage points) compared to 2017 and 2015 (+8.6 percentage points). A corresponding decrease in white characters with disabilities was observed. Second, while the percentage of female characters with disabilities was not different than in 2017, there were still significantly more female characters with disabilities in 2018 than in 2015 (19%). However, the high was observed in 2016 (32.3%).

Table 26
Demographic Profile of Characters with Disabilities: 2015-2018

Measure	2015	2016	2017	2018
% of male characters w/disabilities	81%	67.7%	69.6%	72.5%
% of female characters w/disabilities	19%	32.3%	30.4%	27.5%
% of white characters w/disabilities	71.7%	74.5%	73%	63.1%
% of UR characters w/disabilities	28.3%	25.5%	27%	36.9%
# of LGB characters w/disabilities	0	1	1	2

The final variable evaluated for characters with disabilities was age. Most characters with disabilities (60.3%, *n*=41) were age 40 or older. Young adult (age 21 to 39) characters represented 27.9% (*n*=19) of all characters with disabilities. A few child (age 0-12; 5.9%, *n*=4) and teen (age 13 to 20; 5.9%, *n*=4) characters were depicted with disabilities across the sample.

This section reveals the lack of representation for characters with disabilities in the most popular films of 2018. Few characters overall, and less than half of films include characters with disabilities in the narrative. Once again, the predominant picture of characters with disabilities is one of a straight, white, male. These results have remained consistent across the four years of films examined, which means that for nearly half of a decade, audiences have seen persistent under and misrepresentation of individuals with disabilities in top movies.

Conclusion

Each year, the Annenberg Inclusion Initiative examines the 100 top-grossing films to understand how gender, race/ethnicity, the LGBTQ community, and characters with disabilities are represented in popular film. The longitudinal nature of this report allows for over time comparisons that point to where progress has occurred or stalled. After assessing 12 years of popular films, this study offers a unique and comprehensive profile of top films and the ways in which advocacy has and has not created change. Below, the major conclusions of the report are reviewed and solutions to accelerate progress are offered.

Gender Gaps Persist in Top-Grossing Films

For more than a decade, advocates have sought to improve the percentage of female characters appearing in film. Yet, year after year, this study reveals that no advancement has occurred. In 2018, girls and women represented 33.1% of all speaking characters, only a few percentage points greater than 2007 (29.9%) or 2017 (31.8%). There were still at least 2 male characters for every female character on screen, and only 9% of the movies in 2018 had a gender-balanced cast. The lack of gender parity on screen is baffling, particularly in small roles that have little impact on the plot.

Where there has been improvement is in leading roles, as 39 films in 2018 had a female lead or co lead character. The drive to feature more girls and women at the center of stories has been a fierce one, and the increase from 2007 (20) and 2017 (33) is notable. Most importantly, the number of films featuring women of color (11) and women age 45 and older (11) has multiplied from previous years. This suggests that both the decision-making process surrounding leading characters and the persistent mythologizing about female appeal have changed in recent years to value stories about girls and women. While there are still more films featuring male leads than female leads, the trend line is moving in a positive direction.

Beyond numerical representation, girls and women on screen are still younger and more sexualized than boys and men. In particular, as children age 0 to 12, adults 21 to 39, and especially at age 40 and older, female characters are outnumbered compared to males. Thus, viewers are unlikely to see girls and women across the life span in roles both large and small. When women are on screen, they are at least 3 times as likely as men to be shown in sexually revealing clothing, with partial nudity, or referenced as attractive. It is imperative that as content creators seek to add more women to popular storytelling, they do so with an eye to remedying the age and objectification gaps we have witnessed for more than a decade in film.

Behind the camera, less than 20% of the directors, writers, and producers of the 100 top-grossing films of 2018 were women. Of the 112 directors hired in 2018, just 5 were women, and only 1 was a woman of color. Moreover, 4 of these women had not directed a top-grossing film in the previous 12 years (at least one woman helmed a top film outside of the time frame considered in this study). The resistance to hiring female directors but particularly to hiring women who have worked in the last decade suggests that one of the primary reasons that there has been no change in the percentage of female directors is because Hollywood decision-makers do not value the experience of female directors of top films—a bias that will be further explored when discussing solutions.

In other creative roles behind the scenes, women continue to be outnumbered. As writers, women filled less than 15% of all roles and were just 21.1% of all producers. These findings are consistent over time, which indicates that there are still gaps in the consideration process for stories told or shepherded by women. The final notable finding for women behind the camera concerns composers. A 12-year high was observed in 2018 for women working as composers. However, this still represents only 3 women hired to craft the musical backbone of a film. There is considerable progress still to be made to increase the overall representation of women as composers above the current 12-year norm of 1.4%.

Disparities in Racial/Ethnic Representation are Disproportionate

Two of the most notable films in 2018 were *Black Panther* and *Crazy Rich Asians*, leading many to believe that a new era of racial and ethnic inclusivity was being ushered in. The results of this investigation demonstrate that a new era may have arrived, but not for all groups. In 2018, the percentage of Black characters increased by 4.8 percentage points compared to 2017, though it was only slightly higher than in 2007. For Asian characters, while the trends were not significant, films from 2018 featured more speaking characters from this group than 2007 or 2017. While this is good news for these two communities, the Latino population, Native American, Native Hawaiian, and MENA groups, as well as those from multiracial/other backgrounds have seen no progress in representation on screen. The lack of inclusion across groups indicates that one or two films that focus on various groups will not be enough to move the needle—instead, sustained efforts that address representation across films are needed.

Nowhere is this more evident than when the invisibility of groups is explored. The number of films without any Black (12) or Asian (32) characters decreased in 2018, while the number missing Latinos (47) increased slightly from 2017. When female characters are the focus, 33 films were without a single Black female, 70 were missing Latinas, and 54 did not feature an Asian or Asian American female character. Additionally, 51 films did not include a girl or woman from multiracial/other groups, while a startling number did not feature female characters who were MENA (92 films), Native Hawaiian/Pacific Islander (97 films), or American Indian/Alaska Native (99 movies). While once again, there is progress evident for Black females in these numbers, these results reveal that the practices at work in the casting process still result in the complete absence of these racial/ethnic groups from film screens.

One explanation for the positive trends surrounding Black characters is found behind the camera. A record number of Black directors—14 men and 1 woman—worked on the top films of 2018. The presence of a Black director was correlated with an increase in Black characters on screen. This was mirrored by our findings on the uptick in Asian characters that occurred when an Asian director was behind the camera. Hiring storytellers from a variety of racial/ethnic groups is a key way to influence the on screen diversity of characters. As Hollywood looks to address the ongoing disparities in racial/ethnic representation, one place to augment their efforts is around hiring directors.

Small Gains, Big Lapses for the LGBTQ Community in Film

In 2018, the number of characters from the LGBTQ community increased, though the percentage remained consistent with previous years. When it comes to invisibility, fewer films in 2018 erased LGB characters and LGB females than in years prior (though it must be noted that three-quarters of movies still erase LGBT characters). Two films featured LGB leads—which is a notable improvement over 2015 when no films were led by an LGBT character.

Where progress is still urgently needed, however, is in the depiction of transgender characters on screen. In 2018 not one film portrayed a trans character, which means that across 500 top movies in the last 5 years, there has been just 1 transgender character—and the depiction was fleeting and humorous in nature. Moreover, the intersectional diversity in portrayals of the LGBTQ community is lacking—most depictions are still focused on white males. As the entertainment industry seeks to include more storylines that feature the LGBTQ community, it is imperative that the focus on these characters broaden as well.

The Representation of Characters with Disabilities is Still Dismal

After four years of assessing the portrayal of characters with disabilities on screen in film, little has changed in 2018. A mere 1.6% of all speaking characters are shown with a disability in top movies, in sharp contrast to the 27.2% of the U.S. population who reports having a disability. Only 9 films featured a leading character with a disability, and far more males than females were likely to be in these roles. Over half of the films in the sample did not include a single character with a disability—and 83 did not feature female characters with disabilities.

The lack of characters with disabilities in top films is disappointing, particularly given the advocacy and activism from the community. Incorporating characters with disabilities into storytelling is essential if film is to reflect the reality of the world in which we live—and when historical or fantastical environments are considered and "reality" is no longer at stake, the lapse is even more glaring. As Hollywood looks to improve representation among other groups, the disability community must be included in those efforts.

Solutions for Change

While there are encouraging findings for women, people of color, and other communities on screen and behind the camera, there is great danger in assuming that all is fixed, or that Hollywood is on an unshakeable course toward greater inclusion. Instead, content creators, decision-makers, and advocates must learn from past efforts and act strategically to gain ground where it is most needed. Below, we once again lay out solutions that can be enacted to create lasting change.

On Screen: Create Long Term Gains by Addressing Large and Small Roles

For several years, we have advocated processes designed to increase inclusion in ways that still privilege storytellers' first amendment rights. At the risk of continuing to shout into the metaphorical void, the opportunities below are offered as a means of building an on screen pipeline for actors from all backgrounds.

Continue to Expand Opportunity in Leading Roles. The increase in lead and co lead roles held by women and underrepresented individuals in 2018 is notable. Continuing to cast inclusively in these parts is imperative, however, to carry forward the progress seen this year. Studios and production companies must not only continue to populate leading roles with Black or Asian leads, but also move to developing and producing stories that feature Latino, Native, or MENA protagonists. Companies must overcome the mythologizing about audience behavior that relies on assumptions, small sample sizes, and different levels of production and marketing support. Overcoming the biases that limit inclusion among leading characters is essential to creating an ecosystem within stories that allows for casting changes across the spectrum of roles.

Just Add Five. We are still at least four years away from achieving gender parity on screen, and a solution we have offered previously remains one of the easiest ways to ensure that half the population is represented on screen. That solution is to "Just Add Five" female characters to every film across the 100 top movies each year. Doing so increases the overall percentage of female characters, and if this new norm is set and repeated every year for the next four, the percentage of male and female characters will be roughly equivalent. As we have noted, these five female characters should also represent the full spectrum of identity—thereby increasing the percentage of women of color, women from the LGBTQ community, and women with disabilities shown in film. This process increases the pipeline for actors from a variety of backgrounds working in small roles, provides employment opportunities, and is relatively inexpensive.

Beat Implicit Bias. The convenient excuse of implicit bias still lingers in the air over Hollywood. While we do not believe that implicit bias is the culprit in every inequality gap, there is one place where it may play a role and thus can be overcome: in casting for small roles. Implicit associations about, for example, gender and jobs, may influence how roles that are defined by an occupation are cast. For instance, "plumber," "firefighter," or "chief executive" may all have implicit links that favor males. If casting directors are not alert to the way that these biases may

influence their choice of who to audition, it is likely that males will be hired for these types of roles. Instead, policies and procedures that ensure that both men and women are auditioned or considered for all roles (regardless of occupation) that do not influence the plot can be a way to beat implicit biases that perpetuate a lack of inclusion.

<u>Grasp the Geographic Reality</u>. In our recent study focusing on Latinos in film, we found that 77% of U.S. states and 2 territories have a higher percentage of Latinos than do Hollywood films.[26] What this reveals (aside from the underrepresentation of Latinos in film) is that there are individuals across the U.S. who can work in feature films, especially in small roles. Producers and casting directors seeking to fill roles while on location should recognize that there are undoubtedly individuals who are available and talented in often-used production locations. Moreover, beyond the Latinx community, individuals who identify as Native American, Native Hawaiian/Pacific Islander, or MENA live and work throughout the U.S. Outside the U.S., particularly in Canada or Europe, Indigenous people and the diaspora of individuals from nations in the Middle East/North Africa and other locales should be considered for film roles. While including individuals from underrepresented populations in the casting and auditioning process may require new procedures or flexibility in old policies, the outcome should be that new voices appear in film and new talent is discovered.

Behind the Camera: Overturn Decision-Making Biases that Prevent Inclusive Hiring

<u>Hire Women More Than Once.</u> The lack of improvement in the percentage of women working behind the camera is disappointing, particularly given the increase in female-led films. However, one easy solution to increase the percentage of female directors is to hire women more than once. Over the past few years, the trend we have witnessed in this study is that the female directors of top-grossing films each year are new to that distinction. Either their first films of this caliber fell outside the time frame of our study (2007 to 2018) or they have previously directed films that fell outside the sample frame (top 100 movies). What this means is that studios are not giving repeat chances to female directors in addition to identifying new female talent. While it is unclear *why* few female directors are hired repeatedly, studios and production companies would be wise to investigate some potential reasons. These could include issues surrounding work and family balance, alternative opportunities in TV or streaming content, and most importantly, how potential directors are evaluated and how their prior experience is valued (or undervalued) by decision-makers. Addressing this gap so that new *and* experienced women are hired to work behind the camera is paramount to changing these stubborn statistics.

<u>Uncouple the Link between Lead and Director.</u> 2018 was a banner year for Black directors working on top-grossing films. It is important to recognize the progress that has been made both in front of and behind the camera, as the majority of these films featured Black/African American leads. However, to the extent that Black directors are given opportunities *only* when a leading character is Black, this restricts employment opportunities behind the camera. The same is true for female directors. While expanding inclusion on screen and behind the camera is crucial, ensuring that directors from all backgrounds have access to *all* jobs is paramount. Studios and production companies can ensure that consideration lists are diverse, and that Black directors

and female directors are brought in to interview for jobs even when the protagonist identity differs from their own. Uncoupling the restrictive link between lead character and director race or gender is essential to reaching equality in this industry.

Limitations

As with any research study, a few limitations are worth noting. We note yearly that this project examines the most popular films released domestically over the last year. The inclusion profile of less popular films might differ from what is presented here. However, the sample used in this study is chosen specifically to monitor the content distributed by some of the largest film companies in the world and the movies that reach the largest audiences. In line with this, examining streaming content would also be instructive, to understand whether audiences see more inclusive portrayals on other platforms. Finally, as we have noted in the past, our definition of disability relies on that stipulated by the ADA and does not include wider mental health issues that might be depicted in film. Other research by our Initiative aims to tackle that gap, to provide a fuller picture of what occurs in top movies.

While there is much to celebrate in the results this year, there is still work to be done. It is clear that opportunity is not available to all in the film industry. As corporations seek to tell more inclusive stories and reach a broader, more diverse audience, tackling the biases that prevent equality are imperative. By ensuring that all groups have access, are represented, and included on screen, film can present a reality that finally looks like the world in which we live.

Acknowledgements

Alexa Burkow	Izzy Brown	Mariam Petrosyan
Alyna Santos	Jackie Martinez	Matthew Acosta
Amanda Lee	Jakaiya Burke	Max Li
Anushka Joshi	Jaryn Valdry	Megan Yao
Awo Jawa	Josh Code	Minely Aghabegian
Briana Oakley	Julissa Romero	Nate McKay
Cailin Soloff	Kaitlyn Prado-Barker	Nina Baker-Mason
Carolin Trocme	Karla Hernandez	Olivia Mossler
Carolyn Zhao	Kasra Orumchian	Rahul Reddy
Chadam Ferrari Pires	Kate Penner	Rebekah Kim
Chris Posslenzny	Katherine Kelly	Ruixue Luo
Colleen Abello	Kenneth Yim	Sabrina Goncalves
Dana Dinh	Khanh Ngo	Simin Wang
Dani Otter	Kieran Sweeney	Sven Lunga
Daniel Huynh	Kian Broder Wang	Taylor Wilcox
Diana Postolache	Lauren Berger	Victoria G. Nunez
Eleonora Viotto	Lauren Renner	Wenyi Yu
Eliana Rosenthal	Lauren Sloan	Xinhui Vivian Ma
Emma Vranich	Lauren Sundine	Xinyu Zhao
Fiona Li	Lily Lieb	Yasuko Yui
Francis Agustin	Lorraine Ge Yaohong	Yaquan Hu
Gabrielle Maddox	Mac Carmichael	Zoe Moore
Huiyun Chen	Madeline Geer	Zoily Mercado
Hyesu Chung	Manessah Dechabert	

Footnotes

1. The 100 top films at the U.S. box office is retrieved from Box Office Mojo. Early in 2019, we issued a "research brief" on the leads/co leads across the 100 top movies of 2018. Some of the findings in this report differ, as the box office for 2018 did not settle until late Spring which changed the composition of films comprising the top 100.

2. Every year, we have delineated meticulously our method in the footnotes section of the yearly report. Given this public record and the fact that this is a longitudinal study, this year the footnotes section will not contain definitions of the study's units of analysis (i.e., character, film) or measures. Please see our 2018 report for all of the conceptual and operational definitions. However, one aspect of our unitizing should be noted. As we measure all speaking characters, some are presented in such a way that independently identifying them is very difficult (i.e., characters that are identical in appearance and voice but ambiguous in number). Three groups across the 100 films and their characters met this definition, were categorized as such and excluded from all analyses. In addition to this caveat, our reliability for unitizing and assigning values to measures are detailed to reveal the consistency of judgments across coders.

    Percentage of agreement was calculated for each film by examining the number of characters seen by two of the three independent coders out of the total number of characters analyzed by the group. The unitizing agreement amongst coders per film was high and similar to the previous annual investigations. Dividing the 100 films of 2018 into four quartiles, the percentages of agreement ranged from 100%-88.9% (Q1, films 1-25); Q2 88.1%-83.9% (films 26-50); Q3 83.7%-77.1% (films 51-75); Q4 76.9%-45.4% (films 76-100). Unitizing agreement was under 70% for 6 films with 5 ranging from 67.6% to 63.6% and one having 45.4% agreement. This was due to one of the three coders analyzing all credited characters rather than just the speaking or named characters.

    Reliability was calculated across coders per variable and for each film using Potter & Levine-Donnerstein's (1999) formula for reliability across independent evaluators. Each measure used in the investigation is detailed below by reporting their median reliability coefficient, mean, and range across 100 films. The median for *type* is 1.0 (Mean=1.0, range=1.0), *sex* 1.0 (M=1.0, range=1.0), *race/ethnicity* 1.0 (M=1.0, range=.66-1.0), *age* 1.0 (M=.95, range=.65-1.0), *parental* 1.0 (M=.99, range=.64-1.0), *relational* 1.0 (M=1.0, range=1.0), *sexually revealing clothing* 1.0 (M=1.0, range=1.0), *nudity* 1.0 (M=1.0, range=1.0), *attractiveness* 1.0 (M=1.0, range=1.0), *role* 1.0 (M=.99, range=.63-1.0), *apparent sexuality* 1.0 (M=1.0, range=1.0), and *transgender* 1.0 (M=1.0, range=1.0), *disability* 1.0 (M=1.0, range=1.0), *communicative disability* 1.0 (M=.95, range=.61-1.0), *mental disability* 1.0 (M=.95, range=.61-1.0), and *physical disability* 1.0 (M=.95, range=.61-1.0).

3. The gender of 23 characters was not possible to ascertain across the 100 top movies. These characters were not included in any of the gender analyses.

4. Motion Picture Association of America (2018, pg. 19). *Theme Report 2017*. Retrieved August 17, 2019 from https://www.mpaa.org/wp-content/uploads/2019/03/MPAA-THEME-Report-2018.pdf U.S. Census Bureau (2016). Quick Facts. Retrieved August 18, 2019 from https://www.census.gov/quickfacts/

5. A chi-square examining the association between rating (PG, PG-13, R) and gender (male, female) was not significant, $p > .05$. It must be noted that no G rated films appeared across the sample of the 100 top fictional films. Seventeen films received a PG rating, 48 a PG-13 rating and 35 a R rating.

6. The relationship between *genre* (action/adventure, animation, comedy, all else) and *character gender* (male, female) was significant, $X^2 (3, 4,422)=19.64$, $p <.05$. Though not reported above, the percentage of females in genres coded as "all else" was 34.4%. Yearly, we rely on Box Office Mojo for genre distinctions, though sometimes those distinctions are overridden by information from the research team and/or other film related websites (i.e., IMDbPro.com, Studio System).

7. U.S. Census Bureau (2018).

8. The association between *character gender* (male, female) and *character age* (0-12, 13-20, 21-39, 40-64, 65 and older) was significant, X^2 (3, 4,060)=119.63, *p* <.01, V*=.17.

9. The relationship between *character gender* (male, female) and *year* (2007-2018) for characters 40 years of age or older was significant, X^2 (11, 19,310)=43.09, *p* <.01, V*=.05. However, a 5 percentage point or greater difference between years was not observed for female characters within this age group.

10. Three chi squares for gender (male, female) by sexually revealing attire (no, yes), nudity (none, some), referred to as attractive (no, yes) were each significant: *SRC* X^2 (1, 4,156)=351.43, *p* <.01, phi=.29; *nudity* X^2 (1, 4,156)=259.71, *p* <.01, phi=.25; *attractiveness* X^2 (1, 4,422)=114.44, *p* <.01, phi=.16.

11. Fredrickson, B.L., & Roberts, T.A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly, 21*, p. 173-206. Roberts, T.A., & Gettman, J.Y. (2004). Mere exposure: Gender differences in the negative effects of priming a state of self-objectification. *Sex Roles, 51*(1/2), p. 17-27. Aubrey, J.S. (2006). Effects of sexually objectifying media on self-objectification and body surveillance in undergraduates: Results of a 2-year panel study. *Journal of Communication, 56*, p. 366-386.

12. For males, the chi-squares for *sexy attire*, *nudity*, and *attractiveness* by year were all significant: *SRC* X^2 (11, 33,547)=112.66, *p* <.01, phi=.06; *nudity* X^2 (11, 33,554)=61.27, *p* <.01, phi=.04; *attractiveness* X^2 (10, 33,565)=69.90, *p* <.01, phi=.05. However, a meaningful difference of 5 percentage points or greater was not observed by year for *sexy attire* or the *attractiveness* analysis. For females, the chi-squares for *sexy attire, nudity*, and *attractiveness* by *year* (2007-2018) were also significant: *SRC* X^2 (11, 15,407)=71.70, *p* <.01, phi=.07; *nudity* X^2 (11, 15,404)=93.00, *p* <.01, phi=.08; *attractiveness* X^2 (10, 15,132)=76.21, *p* <.01, phi=.07. Deviations of 5 percentage points or greater were observed across all three of these measures for females.

13. The relationship between females' *age* (13-20 years, 21-39 years, 40-64 years) and *sexually revealing clothing* (no, yes) was significant, X^2 (2, 1,183)=12.56, *p* <.01, V*=.10. A similar significant association was observed for *nudity* (none, some), X^2 (2, 1,183)=11.14, *p* <.01, phi=.10 and *attractiveness* X^2 (2, 1,217)=7.39, *p* <.05, phi=.08.

14. The 12 year trends were examined for females' *sexually revealing attire* (no, yes) and *nudity* (none, some) across *three ages groups* (13-20 year olds, 21-39 year olds, 40-64 year olds). Both of these analyses were significant across the three age groups: *teens SRC* X^2 (11, 1,455)=23.67, *p* <.05, phi=.13; *young adults SRC* X^2 (11, 8,130)=45.83, *p* <.05, phi=.08; *middle aged SRC* X^2 (11, 3,586)=46.43, *p* <.01, phi=.11; *teen nudity* X^2 (11, 1,454)=38.80, *p* <.01, phi=.16; *young adults nudity* X^2 (11, 8,130)=56.76, *p* <.01, phi=.08; and *middle aged nudity* X^2 (11, 3,584)=46.85, *p* <.05, phi=.11.

15. The relationship between *director gender* (no female director attached vs. female director attached) and *character gender* (male, female) was significant, X^2 (1, 4,422)=19.05, *p* <.01, phi=.07.

16. Akin to the previous annual investigations, coders were trained on evaluating characters in film for their apparent race/ethnicity using all data provided in the plot. This includes visual information (e.g. skin tone, facial features, etc.), nationality, first and last name, cultural cues, language, family, and context. Our confidence in categorizing race/ethnicity is high as previously we demonstrated a .90 correlation between our coders' judgments and the underrepresented racial/ethnic status of actors playing characters in media content. Animals and supernatural creatures that are not human-like or resemble their species more so than Homo sapiens were not sorted into any category for *race/ethnicity* and are excluded from all analyses.

As of August of 2019, we will be using Latino to refer to Hispanic/Latinos on screen and behind the camera in film. Please see our Latino in Film report and popular press for explanation for this shift.

17. *2017 American Community Survey 1-Year Estimates*. (2017). Retrieved from: https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_17_1YR_B02001&prod

Type=table. *National Arab American Demographics*. (2018a). Retrieved from: https://assets.nationbuilder.com/aai/pages/9843/attachments/original/1551198642/National_Demographics_SubAncestries_2018.pdf?1551198642. *National Arab American Demographics*. (2018b). Retrieved from: https://assets.nationbuilder.com/aai/pages/9843/attachments/original/1551198642/National_Demographics_SubAncestries_2018.pdf?1551198642.

18. The relationship between *genre* (action/adventure, animation, comedy, all else) and *character race/ethnic* (underrepresented vs. not) was significant, X^2 (3, 3,895)=17.63, *p* <.01, phi=.07. Though not reported above, the percentage of underrepresented characters in genres coded "all else" was 32.9%. Within genre grouping, the chi squares were also significant, *action/adventure* X^2 (11, 12,208)=126.75, *p* <.01, V*=.10; *animation* X^2 (11, 2,461)=277.36, *p* <.01, V*=.34; *comedy* X^2 (11, 14,002)=122.89, *p* <.01, V*=.09; *all else* X^2 (11, 18,597)=160.61, *p* <.01, V*=.09.

19. A chi-square for *character gender* (male, female) by *character race/ethnicity* (white, Black, Hispanic/Latino, Asian, other) was significant, X^2 (4, 3,895)=28.74, *p* <.01, phi=.09.

20. Each hypersexualization measure was run separately by race/ethnicity (white, Black, Hispanic/Latino, Asian, other) within gender. For males and females, not one of the analyses were statistically significant *p* > .05.

21. The chi square examining the relationship between *director race* (Black vs. not Black) and *character race/ethnicity* (Black vs. not Black) was significant, X^2 (1, 3,895)=428.60, *p* <.01, phi=.33.

22. The association between *director race* (Asian vs. not Asian) and *character race/ethnicity* (Asian vs. not Asian) was significant, X^2 (1, 3,895)=256.88, *p* <.01, phi=.26.

23. Smith, S.L., Choueiti, M., Case, A., Pieper, K., Clark, H., Hernandez, K., Martinez, J., Lopez, B., & Mota, M. (2019). *Latinos in Film: Erasure On Screen and Behind the Camera across 1,200 Popular Films*. Annenberg Inclusion Initiative. Los Angeles, CA.

24. Specific definitions regarding disability can be found in previous year's reports. ADA text can be found at https://www.ada.gov/regs2016/final_rule_adaaa.html.

25. Brault, M.W. (2012). Americans with Disabilities: 2010. U.S. Department of Commerce Economics and Statistics Administration. Available: https://www.census.gov/content/dam/Census/library/publications/2012/demo/p70-131.pdf.

26. Smith et al. (2019). *Latinos in Film.*