

Inequality Across 1,600 Popular Films: Examining Gender, Race/Ethnicity & Age of Leads/Co Leads From 2007 to 2022

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February 2023

USC Annenberg
Inclusion Initiative

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Research Brief

Annenberg Inclusion Initiative
University of Southern California

The purpose of this research brief was to examine longitudinally the gender, race/ethnicity, and age of protagonists in popular films. Our analysis included 1,600 top movies, with a specific focus on the 100 highest-earning domestic fictional films theatrically released from 2007 to 2022.¹ Each movie was assessed for the type of protagonist: single lead, roughly equal co lead, or ensemble cast. Then, the actors driving those stories were evaluated for gender (male, female, nonbinary), race/ethnicity (White, Black, Hispanic/Latino, Asian, Middle Eastern/North African, Native Hawaiian/Pacific Islander, American Indian/Alaskan Native, Multi-racial/Multi-ethnic).² These latter categories were collapsed to create an underrepresented status vs. not (White). We also assessed whether actors were 45 years of age or older at the time of theatrical release.

Below, we highlight key findings for gender, underrepresented status, and age of protagonists within movies with leads/co leads only.³ Put differently, this report does not delineate results on movies with ensemble casts as that information will be highlighted in our *Inequality in Popular Films* report out later this year. By identity group, the results from 2022 are presented and then we compare those trends to findings from 2021 and then 2007. The report concludes by summarizing key trends and offering solutions for change. For all analyses, we only made noise about differences at or above 5 percentage points. This allows us to focus on meaningful change rather than trivial deviation between years or groups.

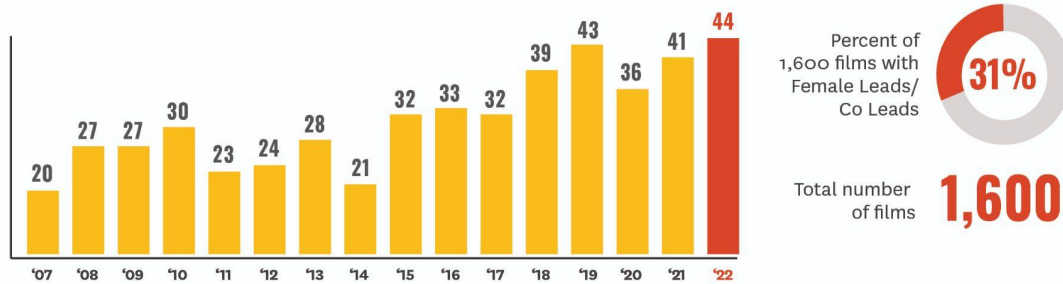
Gender

A total of 44 films featured a female-identified actor as lead/co lead driving the plot.⁴ As shown in Infographic 1, the percentage of girls and women as protagonists in 2022 (44%) was higher but not meaningfully different from the percentage in 2021 (41%). However, the results for 2022 (44%) were a full 24 percentage points higher than the results for 2007 (20%). This upward trend is notable, but still falls short of the U.S. Census benchmark, where girls and women comprise over 50% of the population.⁵

Infographic 1

FEMALES IN LEADING ROLES HOLD STEADY

Prevalence of female leads or co-leads across 1,600 films, in percentages



While highlighting gender overall is critical, an intersectional lens illuminates which female actors continue to be underrepresented when it comes to employment access and opportunity. Examining age, we were curious about the percentage of films that focused on women 45 years of age or older at the time of theatrical release. Why? Because Hollywood has long valued youth and beauty over experience thereby putting a sell by date on women actors in their forties and beyond.

Only 10 films in 2022 featured a woman 45 years of age or older at the time of theatrical release as leads/co leads. In comparison, 35 movies depicted a man in the same age bracket. This calculates to a gender ratio of 3.5 films led/co led by older men to every 1 film led/co led by an older woman.

The actors and 10 movies with women 45 years of age or older were Sandra Bullock (*The Lost City*), Michelle Yeoh (*Everything Everywhere All at Once*), Julia Roberts (*Ticket to Paradise*), Viola Davis (*The Woman King*), Jennifer Lopez (*Marry Me*), Halle Berry (*Moonfall*), Lesley Manville (*Mrs. Harris Goes to Paris*), Tilda Swinton (*Three Thousand Years of Longing*), Cate Blanchett (*Tár*), and Aishwarya Rai Bachchan (*Ponniyin Selvan: Part I*).

Infographic 2

WOMEN 45 YEARS OF AGE AND OLDER ARE RARELY SHOWN AS LEADS

Of the 100 top-grossing films in 2022, the number with leads/co leads age 45 and older



7 films in 2021 had a woman 45 years of age or older as a lead/co lead. In contrast, 27 movies had a male in this age bracket as the lead/co lead.

While the number of films that featured women 45 years of age or older as leads/co leads in 2022 (10 movies) did not differ meaningfully from 2021 (7 films), there was a notable increase compared to 2007 (1 film). Across the 16-year sample, 2018 (11 films) was the strongest year for movies with an older female protagonist.

In sum, girls and women were still less likely than boys and men to be the lead/co lead across the 100 top performing fictional films in 2022. This gap only widened, when we considered women protagonists 45 years of age or older. Discrimination in top films is not limited to gender, however. As we will see in the following section, people of color also have been excluded from leading/co leading roles in cinematic storytelling.

Underrepresented Status

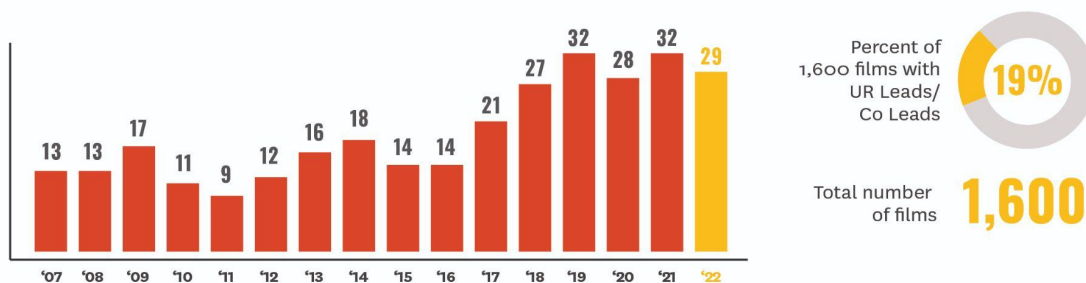
Of the 100 top movies in 2022, 29% featured an underrepresented lead/co lead. Across the 29 movies, a total of 33 lead/co lead actors were from underrepresented racial/ethnic groups.⁶ 21.2% (n=7) of the leads/co leads were Asian, 36.4% (n=12) were Black, 18.2% (n=6) were Hispanic/Latino, and 24.2% (n=8) were Multiracial/Multiethnic.

Has the percentage of leads/co leads featuring people of color changed? Yes and no. 2022 was slightly lower than 2021, where 32% of films were led by a protagonist of color. Similar to last year, there has been a substantial increase in the number of underrepresented leads/co leads since 2007 (13%). No matter which year is examined, however, the percentage of underrepresented leads/co leads is notably below U.S. Census (40.7%).⁷

Infographic 3

PROGRESS PAUSES FOR PEOPLE OF COLOR AS LEADS/CO LEADS IN TOP FILMS

Prevalence of underrepresented leads or co-leads across 1,600 films, in percentages



It is important to intersect gender and race/ethnicity, to examine whether women and girls of color are receiving the same access and opportunity as their male peers. As seen in Infographic 4, **a total of 16 movies across the 100 top films of 2022 featured a woman of color driving the plot.** This percentage is not only substantially above 2007 (1 film) but also 2021 (11 films). Two additional caveats to these findings are important to note. First, there were more movies in 2022 with women of color (16 movies) at the center than men of color (14 movies). Second, two movies in 2022 depicted nonbinary **actors** in leading/co leading roles: Janelle Monáe (*Glass Onion: A Knives Out Mystery*) and Amandla Stenberg (*Bodies Bodies Bodies*).

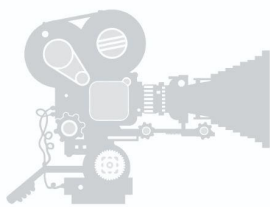
Here, we highlight the films featuring women of color as leads/co leads in order of box office receipts: Letitia Wright (*Black Panther: Wakanda Forever*), Xochitl Gomez (*Doctor Strange in the Multiverse of Madness*), Keke Palmer (*Nope*), Melissa Barrera (*Scream*), Michelle Yeoh (*Everything Everywhere All at Once*), Viola Davis and Thuso Mbedu (*The Woman King*), Georgina Campbell (*Barbarian*), Anya Taylor-Joy (*The Menu*), Nathalie Emmanuel (*The Invitation*), Eiza González (*Ambulance*), Jennifer Lopez (*Marry Me*), Halle Berry (*Moonfall*), Naomi Ackie (*Whitney Houston: I Wanna Dance with Somebody*), Danielle Deadwyler (*Till*), Taylor Russell (*Bones and All*), and Aishwarya Rai Bachchan (*Ponniyin Selvan: Part I*).

Infographic 4

WOMEN OF COLOR INCREASE AS LEADS/CO LEADS IN 2022

Prevalence of underrepresented female leads/co leads in 2022

Of the 100 top films in 2022...



Depicted an **Underrepresented Female Lead or Co Lead**

And of those Leads and Co Leads*...

11 films in **2021** had an underrepresented female lead or co lead

5 films in **2022** had a woman of color age 45 or older as a lead or co lead

*Excludes films w/ensemble casts

Zero films in 2020 and 2021 had a woman of color age 45 or older as a lead/co lead

We continued our intersectional analysis by examining the gender, race/ethnicity and age of leads/co leads. Five movies featured a woman of color 45 years of age or older in the leading/co leading role in 2022. This was a substantial increase from 2021, when there were none. Comparatively, a total of 8 films in 2022 had a male identified lead/co lead of color in the same age bracket. Outpacing older protagonists of color were White men, however. A full 27 movies in 2022 featured a White male 45 years of age or older driving the plot. Simply put, older White men worked 5.4 times more frequently across the 100 top films of 2022 than older underrepresented women.

Distributor

To examine how companies are doing on inclusion, we evaluated major distributors across the 100 top movies of 2022. The distributors were categorized as follows: Paramount Pictures, Sony Pictures Entertainment, Universal Pictures, Walt Disney Studios, and Warner Bros. Pictures. A mini major distributor, Lionsgate, was also included in the analysis. All movies distributed by smaller companies (e.g., A24, Roadside Attractions) were coded as “other.” This year, we grouped Walt Disney Studios and 20th Century together. Subsidiary or specialty companies were categorized by parent organization (i.e., Focus Features and DreamWorks with Universal Pictures). For this analysis, we focused only on the number of movies in 2022 with a female or underrepresented lead/co lead out of the distributors’ total number of movies in the top 100.⁸

Infographic 5

FEMALE AND UNDERREPRESENTED LEADS/CO LEADS BY DISTRIBUTOR

The percentage of films released by each distributor across the 100 top-grossing films of 2022...

GIRL/WOMAN LEAD/CO LEAD			UNDERREPRESENTED LEAD/CO LEAD		
DISTRIBUTOR	2022	# OF FILMS	DISTRIBUTOR	2022	# OF FILMS
LIONSGATE	75%	3	LIONSGATE	25%	1
PARAMOUNT PICTURES	55.6%	5	PARAMOUNT PICTURES	33.3%	3
SONY PICTURES	33.3%	4	SONY PICTURES	33.3%	4
UNIVERSAL PICTURES	38.5%	10	UNIVERSAL PICTURES	23.1%	6
WALT DISNEY STUDIOS	33.3%	5	WALT DISNEY STUDIOS	33.3%	5
WARNER BROS. PICTURES	16.7%	1	WARNER BROS. PICTURES	33.3%	2
TOTAL	38.9%	28	TOTAL	29.2%	21

A total of 28 films were distributed by other companies. 57.1% or 16 of those films had a female lead/co lead and 28.6% or 8 films had an underrepresented lead/co lead

As highlighted in Infographic 5, Lionsgate was the top performer of stories that centered on women and girls. Seventy-five percent of all films within the 100 top movies released by Lionsgate in 2022 featured female leads/co leads. Paramount Pictures (56%) was also a top performer, as more than half of their films featured a girl or woman driving the plot. At least a third of projects were spearheaded by a female lead/co lead at Universal Pictures (38.5%), Walt Disney Studios (33.3%), and Sony Pictures Entertainment (33.3%). The distributor with the worst track record in 2022 was Warner Bros. Pictures, as only 16.7% of their films featured a female protagonist.

Shifting to underrepresented leads/co leads, a third (33.3%) of multiple studios’ movies centered around a person of color: Paramount Pictures, Sony Pictures Entertainment, Walt Disney Studios, and Warner Bros. Pictures. Rounding out the bottom were Lionsgate (25%) and Universal Pictures (23.1%). Notably, not one industry giant reached proportional representation with U.S. Census (40.7%).⁹

Conclusion

Each year, we examine the gender, race/ethnicity, and age of leads and co leads across top-grossing movies. This report examines trends from 2007 to 2022, with a particular focus on the most popular theatrical releases in 2022. There are three major findings from the study.

First, optimism about positive change in film is unwarranted. Although there has been an increase in lead/co lead roles for girls and women since 2007, there was no significant difference between 2021 and 2022. The pace of industry change is certainly not a breakneck one, as the percentage of female leads/co leads in 2022 was almost identical to 2019. The advocacy and activism that may have fueled

change in the mid- to late-2010s may have had a short-term impact, but more is needed to achieve lasting improvement.

Second, and similarly, for people of color in lead/co lead roles, there has been virtually no sustained change since 2018. While overall improvement since 2007 is evident, the last significant positive increase was from 2017 to 2018. It is clear from these figures that any commitments to diversity or inclusion were mere lip service when it comes to key roles on screen.

Third, the lone bright spot in this analysis is the uptick for women of color in leading/co leading roles. In 2022, women of color outnumbered men of color as leads/co leads. This increase is an important one, as women of color have consistently and significantly been underrepresented not only as leads/co leads, but as directors, producers, as casting directors, studio executives, editors, composers, production designers, costume designers, cinematographers, critics, and as characters. Ensuring that stories about women of color protagonists, as well as filling above and below the line roles with underrepresented women is a critical way to provide access and opportunity as well as shift attitudes and beliefs in audiences.

Finally, the results by distributor revealed that only two companies reached proportional representation when it came to girls/women in leading or co leading roles. Moreover, none of the distributors achieved proportional representation when it came to underrepresented leads/co leads. These figures demonstrate that the lack of progress for women and people of color as protagonists is not due to a single company missing the mark, but instead due to sluggishness that is industry-wide.

Solutions

The pathway to increased representation among leads/co leads is one that requires change across companies. Our analysis demonstrates that distributors are not moving collectively toward equality. Rather, some companies have pushed forward faster in 2022 while others lag behind. This seems to be a trend from year-to-year; companies have not consistently ensured that half their films have girls/women in the lead, nor have they reached proportional representation for underrepresented leads/co leads.

Only when every major studio and distributor reaches equity will we see industry-wide improvement. Doing so means that executives— particularly those with greenlight authority— must think about how each film they add to their slate contributes to reaching parity. This requires confronting biases that may be likely to limit how many films about women or underrepresented protagonists reach audiences. This includes perceptions about what or who is likely to sell at the box office. It also necessitates examining marketing and production budgets so that films by and about women and people of color receive more equitable distribution of resources. By critically evaluating the decision-making process and the way that stories are supported within a studio, companies can remove the barriers that prevent more films that star women and people of color from making it to the screen.

Limitations

As with all research investigations, some limitations must be noted. Across our annual reports, we focus on the most popular movies each year. This allows us to understand and reflect to the industry how the movies that reach the largest share of moviegoers represent the audience. However, films that are less popular may be more likely to feature protagonists from underrepresented communities or

girls/women. Other researchers may want to explore whether this is the case, although we caution against drawing conclusions about box office success from such data, given how a multitude of factors apart from lead character gender or race/ethnicity can influence financial performance.¹⁰

Additional work should also explore whether the trends surrounding lead characters in film content on streaming platforms are similar to or different from those reported here. There may be differences between distribution models that reflect additional biases about audience preferences on the part of executives. Finally, while we explored the gender, race/ethnicity, and age¹¹ of lead actors in this report, we plan to provide further insight into LGBTQIA+ representation and the inclusion of characters with disabilities in our *Inequality in Popular Films* report, to be released later this year.

In sum, 2022 did not reflect significant gains for women or people of color as leads/co leads in top films. While women of color did trend upward, there is clearly more to do to ensure that industry-wide progress is achieved. 2022 was a year when box office did not fully rebound and when decision-makers hoped to compel audiences to return to theaters. Yet, it seems that focusing storytelling on women and people of color was not an avenue that studios aggressively explored. At the start of 2023, as executives plan for the future, it is time to make equity and inclusion more than a strategy but an underlying business imperative.

Acknowledgements

Even shorter research briefs like this require teamwork to complete. Thank you to our many sponsors and supporters who have been our allies over the years. For this report, our staff team was indispensable in the data collection process. Thank you to Ariana Case, Bryan Davis, Matthew Davis, Karla Hernandez, Al-Baab Khan, Brooke Kong, Zoily Mercado, Zoe Moore, Sarah Neff, Terrell Shaffer, Samuel Wheeler, and Yasuko Yui. We are also grateful for the support of Lhani Jamison and Ashley Kolaya.

Footnotes

1. The list of top films for 2022 was pulled from Box Office Mojo on January 12th 2023. We reconfirmed that no changes appeared as of February 1st, 2023. The list featured the 100 top theatrically released (within year) films across North America. Documentaries, television shows, and short films were removed prior to selecting the 100 top movies.

2. The categories and labels for the race/ethnicity variable were derived and adapted originally from the U.S. Census distinctions.

3. This report focuses on actor's access and opportunities to leading / co leading roles. The focus on actors rather than characters is intentional. Each leading actor can be classified by his/her/their gender and race/ethnicity. If we were to focus on characters, we would be missing data for voice actors that play characters that may or may not have a race/ethnicity (i.e., a flower that talks). Ultimately, actors with a gender, race/ethnicity, and age are the ones receiving compensation for their efforts independent of the type of character they play.

4. There were a total of 3 female identified voice actors whose on screen character's apparent gender was identified as male. These three include: Kayleigh McKee (*Jujutsu Kaisen 0: The Movie*), Colleen Clinkenbeard (*One Piece Film: Red*), Jenny Slate (*Marcel the Shell with Shoes On*). Additionally, we did not count (*Glass Onion: A Knives Out Mystery*) as a female-driven film as our measure captures the actor's identity and not the character's. More specifically, Janelle Monáe identifies as nonbinary. It is also important to mention that Kayleigh McKee is a transgender woman carrying a leading/co leading role in a 2022 film.

5. See U.S. Census figures (<https://www.census.gov/quickfacts/fact/table/US#>).

6. The 33 actors were only counted once independent of how many times they appeared across the 100 top films. For example, Dwayne Johnson and Idris Elba both led two films in the sample. Put differently, this variable measures the total number of people that are given at least one opportunity to lead a film

7. See U.S. Census figures (<https://www.census.gov/quickfacts/fact/table/US/PST045222>).

8. The percentage of female or underrepresented leads/co leads was calculated out of the total number of films a distributor released. Put differently, ensemble films were included in the denominator of each distributor.

9. See U.S. Census figures (<https://www.census.gov/quickfacts/fact/table/US/PST045222>).

10. Smith, S.L., Weber, R., Choueiti, M., Pieper, K., Case, A., Yao, K., & Lee, C. (2020). The Ticket to Inclusion: Gender & race/Ethnicity of Leads and Financial Performance Across 1,200 Popular Films. *Annenberg Inclusion Initiative*. Report presented to ReFrame.

11. In conducting analytics for this year's report, we discovered an error in the 2022 research brief on leads/co leads pertaining to the age of protagonists across some re releases. For a handful of films, actors' age at the time of rerelease was used rather than their age when the film first screened in U.S. theaters. We corrected this in our 2023 report by using the actors' age at original release, and updated the findings accordingly.