

Inequality Across 1,500 Popular Films: Examining Gender and Race/Ethnicity of Leads/Co Leads from 2007 to 2021

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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 and race/ethnicity of leads/co leads in popular films. Our analysis included 1,500 top movies, with a specific focus on the 100 included highest-earning domestic fictional films yearly between 2007 and 2021.¹ Films were split into two categories, those with a lead/co lead driving the plot or those driven by an ensemble storyline. In this report, only movies with single leads or two roughly equal co leads were assessed.² While films with ensemble casts were excluded here, they will be included in our longer investigation - *Inequality in Popular Films* - released later this year.

Due to the impact COVID-19 had on theatrical releases, we had to ensure that the 100 top movies reflected the same population as in previous years. Despite irregularities (e.g., excessive re-releases, lower box office returns) demonstrated in our *Inclusion in the Director's Chair* report released last month, the 100 most popular movies of 2020 and 2021 behaved similarly in terms of hiring practices to those released between 2007 and 2019. As such, we included all 100 narrative movies using Box Office Mojo data as we have in previous reports. See footnote 1 for a detailed explanation and justification of our approach to sampling "top films" in 2020 and 2021.

Clearly, this is the most comprehensive analysis of gender and race/ethnicity of leading/co leading characters in popular movies to date. Our report is divided into four sections. The first section focuses on the gender of leads/co leads while the second examines protagonists from underrepresented racial/ethnic groups. In the third section, we explore which major distributors excelled and/or struggled to release films centered on the experiences of women and/or people of color. The paper concludes by summarizing the results and offering solutions for change.

In the following section, we present 2021 trends first and then compare those findings to trends observed across the 100 top films of 2019 and 2007. The focus on 2019 was intentional, as we wanted to know how the industry was currently performing relative to inclusion gains witnessed pre-pandemic. For all analyses, we only made noise about differences of 5 percentage points or greater. By doing such, we focus on meaningful differences and not trivial deviation between years or groups.

Gender

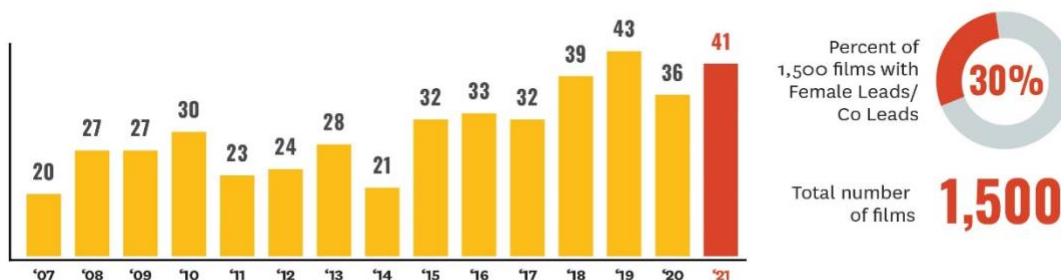
Of the 100 top movies of 2021, a full 41% featured a female lead/co lead driving the plot, while in 2020 only 36% featured a female protagonist. As shown in Infographic 1, **the percentage of girls and women as leads/co leads in 2021 (41%) did not meaningfully differ from the percentage in 2019 (43%)**. Thus, the pre-pandemic gains observed at the box office in 2019 held into 2021 after a dip in 2020. Further, the films with a female lead/co lead in 2021 were 21 percentage points higher than the films with a female lead/co lead in 2007 (20%). While these gains are notable, the film industry still has not achieved proportional representation, despite all of the activism and attention in the popular press. That is, girls

and women comprise just over 50% of the U.S. population which is roughly 9 percentage points higher than what we see in popular films.³

Infographic 1

LITTLE HAS CHANGED FOR FEMALE LEADS/CO LEADS IN FILM

Prevalence of female leads or co leads across 1,500 films, in percentages



Although looking at gender overall is important, it only reveals part of the story. The way in which gender intersects with other factors, such as age or race/ethnicity, illuminates how access and opportunity vary across females' demographic characteristics. Here, we focus on chronological age by examining the frequency with which women 45 years of age or older at the time of theatrical release were shown driving the plot.

Not surprisingly, there is a "sell by date" for older female protagonists in film. As show in Infographic 2, across the 100 top movies of 2021, only 7 featured a woman 45 years of age or older whereas 27 depicted a man in the same age bracket. This is a gender ratio of seeing 3.9 films starring older men to every 1 film starring an older woman. Even worse? All 7 women were from only a single racial/ethnic group (i.e., Caucasian).

Infographic 2

WOMEN AGES 45 AND OLDER ARE RARELY SHOWN AS LEADS

Of the 100 top-grossing films in 2021, the number with leads/co leads age 45 and older



4 films in 2020 had a lead/co lead that was a woman 45 years of age or older. 22 had a man age 45 or older in a lead/co lead role.

Has the percentage of films featuring women 45 years of age or older as leads/co leads changed over time? Yes and no. When we compared movies with older women as protagonists in 2021 to 2019 (3 movies), 2020 (4 movies) or 2007 (1 movie), notable increases were observed. However, 2018 outperformed all of these years with 11 films featuring women 45 years of age or older as leads/co leads.

Lo and behold, girls and women were still less likely than boys and men to be seen as protagonists in the 100 top performing Hollywood films of 2021. This gap widens exponentially when we consider female protagonists 45 years of age or older. This oppression is not limited to gender, however. As we will see in the next section, people of color have also been shut out of leading/co leading roles in cinematic storytelling.

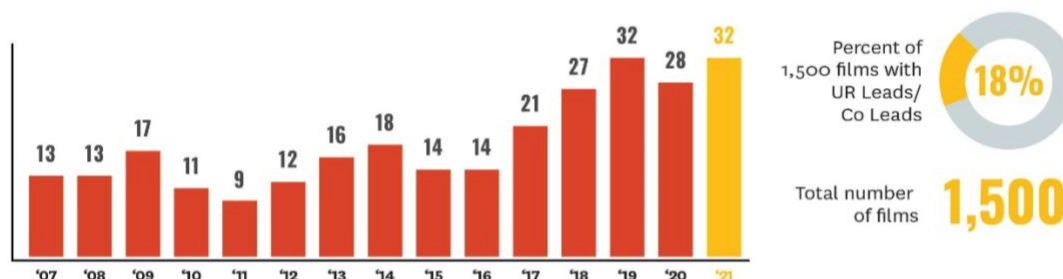
Underrepresented Status

Of the 100 top films in 2021, **only 32% featured an underrepresented lead/co lead. This figure is slightly higher than 2020 when only 28% of movies had a lead/co lead of color.** 2021 findings are still notably below proportional representation, as people of color make up 40% of the U.S. population.⁴ The 32 movies depicted a total of 34 non-white leads/co leads. Eleven or 32.3% of the leads/co leads were Asian, 32.3% ($n=11$) were Black, 8.8% ($n=3$) were Hispanic/Latino, 2.9% ($n=1$) were Middle Eastern/North African, and 23.5% ($n=8$) were Multiracial/Multiethnic.

Infographic 3

INCHING TOWARDS INCLUSION

Prevalence of underrepresented leads or co leads across 1,500 films, in percentages



Over time trends can be found in Infographic 3. As shown, the number of leads/co leads of color across the 100 top films of 2021 (32 movies) remained on par with the number of leads/co leads across the 100 top films of 2019 (32 movies). There has been a significant increase of underrepresented leads/co leads by 19 percentage points from 2007 (13 movies) to 2021 (32 movies), however.

Given the pronounced differences noted in the previous section, it was important to intersect gender and race/ethnicity to assess the frequency of films with women vs. men of color at the center. As seen in Infographic 4, **only 11 of the 100 top-grossing movies of 2021 featured a woman of color as the lead/co lead of the story.** In order of box office receipts, those 11 women of color included: Gemma Chan (*Eternals*), Stephanie Beatriz (*Encanto*), Kelly Marie Tran (*Raya and The Last Dragon*), Rachel Zegler (*West Side Story*), Taylor Russell (*Escape Room: Tournament of Champions*), Jennifer Hudson (*Respect*), Isabela Merced (*Spirit: Untamed*), Maggie Q (*The Protege*), Alexis Louder (*Copshop*), Taylour Paige (*Zola*), and Chanté Adams (*A Journal for Jordan*).

Infographic 4

WOMEN OF COLOR LEADS/CO LEADS ARE RARE IN TOP FILMS

Of the 100 top films in 2021...



As a point of comparison, 9 movies in 2020 had a woman of color in a lead/co lead role. However, 2021 and 2020 had roughly the same number of males of color coded as a lead/co lead. Of the 100 top movies in each individual year, we found that 23 of the films in 2021 and 22 films in 2020 had an underrepresented male protagonist. This translates into 2.1 males of color to every 1 female of color across the most popular movies of 2021. Over time, the number of films featuring women of color as leads/co leads *decreased* from 2019 (17 films) to 2021 (11 films) but substantially *increased* from 2007 (1 film).

Factoring in age with race/ethnicity and gender paints an even more problematic picture. **In 2021 and 2020, not one woman of color 45 years of age or older was depicted driving the storyline.** Comparatively, there were a total of 7 men of color 45 years of age or older across both the 100 top films of 2021 and 2020. While underrepresented males fared better than underrepresented females, a total of 20 movies had a Caucasian man 45 years of age or older in a leading/co leading role in 2021. One film featured a woman of color 45+ in 2019 and over time, very few films have been centered in women of color age 45 and older. Matter of fact, less than 1% of 1,500 films featured a woman or girl of color in a leading or co leading role from 2007 to 2021.

Overall, the results in this section reveal that when Hollywood tells stories about people of color it has typically been about the lives of men and boys. We now turn our attention to the companies that distribute the 100 top-grossing films yearly, in an effort to see which organizations were more or less committed to inclusive storytelling.

Distributor

Every top-grossing film was categorized as being distributed by one of the major studios (i.e., 20th Century, Paramount Pictures, Sony Pictures Entertainment, Universal Pictures, Walt Disney Studios, Warner Bros. Pictures) or mini majors (i.e., Lionsgate, STX).⁵ All movies distributed by companies apart from these 8 were categorized as “other.” To assess inclusivity, we focused on the total number of films each company distributed that depicted a female lead/co lead or underrepresented lead/co lead across our sample of 2021 movies. In this section, we focus solely on films from 2021 given disruptions faced by distributors in 2020.⁶

Infographic 5

FEMALE AND UNDERREPRESENTED LEADS/CO LEADS BY DISTRIBUTOR

Across the 100 top-grossing films of 2021, the percentage released by each distributor with a...

GIRL/WOMAN LEAD/CO LEAD			UNDERREPRESENTED LEAD/CO LEAD		
DISTRIBUTOR	2021	# OF FILMS	DISTRIBUTOR	2021	# OF FILMS
WALT DISNEY STUDIOS	85.7%	6	WALT DISNEY STUDIOS	57.1%	4
20TH CENTURY	54.5%	6	WARNER BROS. PICTURES	41.2%	7
PARAMOUNT PICTURES	50%	2	LIONSGATE	33.3%	2
SONY PICTURES ENT.	41.7%	5	UNIVERSAL PICTURES	31.3%	5
LIONSGATE	33.3%	2	PARAMOUNT PICTURES	25%	1
WARNER BROS. PICTURES	23.5%	4	SONY PICTURES ENT.	16.7%	2
UNIVERSAL PICTURES	18.7%	3	20TH CENTURY	9.1%	1
TOTAL	38.3%	28	TOTAL	30.1%	22

Films distributed by other companies are not included in this graphic.

As shown in Infographic 5, **Walt Disney Studios was a top performer of films with women and girls at the center.** Fully 85.7% of all movies Walt Disney Studios released in 2021 featured female leads/co leads. 20th Century (54.5%) and Paramount Pictures (50%) were also top performers with half or more of their top-grossing movies focused on female protagonists. The companies with the worst track records were Universal Pictures and Warner Bros. Pictures, which only had 18.7% and 23.5% (respectively) of their movies focused on girls/women.

Pivoting to underrepresented leads/co leads, the top performer once again was Walt Disney Studios. A full 57.1% of their top-grossing fare featured leads/co leads of color. Thus, the choices executives make at Walt Disney Studios reveal that meeting or exceeding proportional representation of gender or race/ethnicity of leads is not just an aspirational goal but one that can be fully reached. Similarly, Warner Bros. Pictures is clocked in with underrepresented leads/co leads across 41.2% of their top movies. The bottom feeders were 20th Century (9% of films), Sony Pictures Entertainment (16.7% of films) and Paramount Pictures (25% of films). Given the racial reckoning across the U.S., these paltry percentages reflect a lack of commitment to inclusion and ensure that audiences are *not* exposed to stories that reflect the demography of this country.

Conclusion

This brief analyzed the demographics of the leads/co leads of the 100 top movies in 2020 and 2021. Specifically, we assessed the gender and race/ethnicity of lead/co lead actors and how these findings

stack up compared to previous reports. This allows us to gain an understanding of how trends may have changed or remained consistent over time. Below, we detail three major findings.

Despite the disruptions to theatrical distribution that were the consequence of the coronavirus pandemic, the progress made for inclusion in leading/co leading roles in 2019 was not lost. The number of films with lead/co leads held by girls/women and those with individuals from underrepresented racial/ethnic groups remained consistent from 2019 to 2021, though female leads/co leads experienced a dip in 2020. This highlights the efforts made behind the scenes to ensure that stories driven by female protagonists and people of color comprise a share of the production pipeline.

However, while Hollywood has maintained a focus on girls/women and communities of color, the intersection of these identities illuminates that gains have not been achieved for everyone. Only 11 films had an underrepresented girl/woman lead/co lead in 2021 and 9 in 2020, a decline from 17 films in 2019.

Beyond gender and race/ethnicity, examining the age of lead/co lead actors also revealed the exclusionary practices that disproportionately affect certain communities, particularly underrepresented women. Of the 34 actors coded as a lead/co lead over the age of 45 in 2021, only 7 were women. In 2020, the number was 4. Not a single one was a woman of color. These results reveal that aging in film— and having older actors at the center of storytelling— remains the purview primarily of white men.

Finally, these results highlight the critical role distributors play in pushing toward greater inclusion. Despite this, there is inconsistency between companies in progress toward greater inclusivity. Walt Disney Studios continues to show the rest of the industry that meeting or exceeding proportional representation is achievable. It will also be imperative to monitor how companies fare relative to pledges they have made following George Floyd's murder in 2020 and if the growth we would expect from companies focused on equity and representation occurs in future years. Ultimately, until Hollywood distributors agree to push for more diverse storytelling across the board, we will not see sustained progress.

Solutions

Although the number of popular films with female and underrepresented leads has not significantly declined from 2019, there is still room for growth. To encourage continued change, one important factor that must be countered is the notion that economic “risk” is tied to identity. As our previous work indicates, the presence of a girl/woman in a lead/co lead role does not significantly impact domestic or international revenue. Films with underrepresented leads/co leads may actually earn more money domestically than films with only white leads.⁷ Yet as the data reveal, even if companies are aware that they may not lose money by being inclusive, they have not fully embraced inclusion either. In the same study, there were differences in the size of production budgets, amount of marketing spend, and distribution density, such that movies with female and underrepresented leads/co leads were given less support in these critical areas than movies with white or male leads. In other words, the perception of economic “risk” tied to identity guides decision-making about who can lead a film.

To solve this problem, companies and producers must critically examine the resources given to films with women and underrepresented leads— and women of color in leading roles in particular. Then, companies must level the field by ensuring that the movies starring women and people of color are not systematically disadvantaged through the allotment of budgets, marketing, or in the distribution process. At each stage of the green light and budget trajectory, executives must seek to decouple “risk” from

identity and assess whether the questions they ask themselves to gauge “risk” for films with women and underrepresented leads are the same they pose about white male-driven movies.

Limitations

With any report it is important to acknowledge limitations. The coronavirus pandemic drastically impacted box office performance and industry behavior in 2020 and 2021. As a result, film titles released theatrically during this time period may function differently from previous years. In an effort to take this change into account, we devised several ways to sample the top films in 2020 and 2021 which offer various representative samples. After analyzing these alternatives, it was clear that there was not a meaningful difference in the percentage of women or underrepresented leads/co leads by sample type.⁸ Thus, the results are not due to sampling bias but reflect the reality of films from 2020 and 2021.

Additionally, the pandemic made it clear that audience members consume entertainment content and film in particular in a variety of ways. This report focused on theatrical releases and does not include streaming platforms as part of the research. Our other work⁹ has focused on at least one streaming platform and additional investigations should continue to probe how inclusive films are across entertainment distribution types. This will provide further evidence for industry progress or stagnancy.

Finally, this research brief focused specifically on gender, race/ethnicity, and age of leads/co leads in popular films. Protagonists with disabilities and members of the LGBTQ community were not reported for this investigation. These trends will appear in our *Inequality in Popular Film* report which will be released later in 2022.

Summing up, this research brief highlights the progress that has been sustained and areas where there is still work to be done. While we are heartened to see progress continue, it must expand to include intersectional progress. Women of color in particular still face marginalization on screen, which imperils the longevity of their careers. If the industry as a whole is truly committed to inclusion, addressing this gap is imperative as they step into the future.

Footnotes

- Domestic earnings were pulled from Box Office Mojo on January 06, 2021. Our report on top-grossing directors from 2020 and 2021 (Smith et al., 2022) details procedures undertaken to ensure that the sample of films evaluated from 2020 and 2021 were equivalent to the samples pulled from 2007-2019. We examined the sample of top 100 films in four distinct ways.

First, as discussed in the body of the report, we assessed all 100 top-grossing films from both 2020 and 2021. Second, we examined films that earned revenue comparable to those films included in previous years. To do so, we capped the sample at films that earned \$20 million or more. This yielded a sample of 45 films in 2021 and 18 films in 2020.

Third, we noted that because box office earnings in 2021 were roughly 60% of 2019 earnings, per *The Hollywood Reporter*, we included films that earned \$12 million or more— which reflects 60% of the \$20 million that is typically earned by the 100th film each year. This provided 58 films for 2021 and 28 films for 2020.

Finally, we examined a set of films that reached the average market share threshold of the top 100 films each year. To calculate this, we examined the percentage of total domestic box office gross receipts accounted for by the top 100 films each year from 2007 to 2019. The average was 91%. Then we calculated how many films in 2021 and 2020 reached this threshold. From these calculations we created a sample of 51 films in 2021 and 37 in 2020.

As shown in Table A, there were no significant differences in the percentage of female leads/co leads or underrepresented leads/co leads based on the type of sample used.

Footnotes Table A
Percentage of Female & Underrepresented Leads/Co Leads Across Top Films of 2021 by Sample Type

Lead Type	100 Top Films	Across Films \$12M+	Across Films \$20M+	91% of Market Share
% of Female Leads/Co Leads	41% (n=41)	36.2% (n=21)	37.8% (n=17)	37.3% (n=19)
% of UR Leads/Co Leads	32% (n=32)	34.5% (n=20)	35.6% (n=16)	35.3% (n=18)
# of Films	100	58	45	51

Note: Columns do not total to 100%. As noted in the text, the table represents four different ways to construct a sample of top films from 2021. Independent of sample type, the findings do not meaningfully differ by 5% or greater.

Footnotes Table B
Percentage of Female & Underrepresented Leads/Co Leads Across Top Films of 2020 by Sample Type

Lead Type	100 Top Films	Across Films \$12M+	Across Films \$20M+	91% of Market Share
% of Female Leads/Co Leads	36% (n=36)	50% (n=14)	50% (n=9)	48.7% (n=18)
% of UR Leads/Co Leads	28% (n=28)	21.4% (n=6)	27.8% (n=5)	21.6% (n=8)
# of Films	100	28	18	37

Note: Columns do not total to 100%. As noted in the text, the table represents four different ways to construct a sample of top films from 2021.

2. Using the three-act structure, we evaluated each film to determine which character(s) were the driving force across the plot. The methodology for determining leads/co leads in previous years is detailed in our prior reports. For 2021 and 2020, at least one member of the Annenberg Inclusion Initiative staff team watched each film in the sample. 1 film was not available to be screened and decisions were made using plot summaries, trailers, and other sources of information.
3. U.S. Census Bureau (2021). Quick Facts. Retrieved on February 3, 2022 from <https://www.census.gov/quickfacts/fact/table/US/PST045221>.
4. U.S. Census Bureau (2021). Quick Facts. Retrieved on February 3, 2022 from <https://www.census.gov/quickfacts/fact/table/US/PST045221>.
5. Distributor information was pulled from Box Office Mojo and IMDbPro. Films distributed by both parent companies and their subsidiaries were included in the analysis.
6. In 2020, 43 of the top 100 films were distributed by companies that were not major or mini-major distributors. Additionally, there were 15 re-releases in 2020, primarily by major distributors. For example, 7 of Walt Disney Studios 8 theatrical releases in 2020 were re-released movies from prior years. Given these factors we elected not to present details in the text.
7. 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*. Report Prepared for ReFrame. Annenberg Inclusion Initiative. <https://assets.uscannenberg.org/docs/aii-2020-02-05-ticket-to-inclusion.pdf>.
8. See Tables A and B above.
9. Smith, S.L., Pieper, K., Choueiti, M., Yao, K., Case, A., Hernandez, K., & Moore, Z. (2021). *Inclusion in Netflix Original U.S. Scripted Series & Films*. Report prepared for Netflix. Annenberg Inclusion Initiative. <https://assets.uscannenberg.org/docs/aii-inclusion-netflix-study.pdf>

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