The Ticket to Inclusion:
Gender & Race/Ethnicity of Leads & Financial Performance Across 1,200 Popular Films

Annenberg Inclusion Initiative
USC

Over the last few years, the box office has routinely demonstrated that female-led films such as *Wonder Woman*, *Star Wars*, and *Beauty and the Beast* can draw large audiences. Matter of fact, these three movies were the top performers at the domestic box office in 2017. Yet, Hollywood decision makers still do not fill 50% of their movie slates with stories driven by girls and women. In fact, less than a third of the 100 top movies from 2007 to 2018 featured a female lead or co lead.

One of the main reasons for the lack of female leads/co leads pertains to perceptions of bankability. A longstanding myth among decision makers in the film industry pertains to whether a female lead can open a film domestically and/or internationally. Often, the old adage or justification for male centric stories went something like this: "Women will watch stories about men but men won't watch stories about women." As a result of this cult-like mantra from male and female executives and agents, a smaller proportion of stories have been told about the adventures of girls and women on the big screen.

The aim of this study is to examine the bankability of female-driven movies. Very few studies have been conducted on this topic and the few that have offer evidence that female-driven content performs equally or better financially than male driven content, particularly when production costs are controlled.[1] However, these studies only focused on one or two production factors but do not account for the multiple variables that may make a film successful or not. For instance, what role does marketing budget play in the bankability of movies with male vs. female leads in the U.S. and abroad? How does the gender composition of the cast, competition at the box office, or the strength of the story affect return on investment? How does animation or rating affect the play of movies?

To date, we do not have the answers to any of these questions. We are not aware of one study examining how gender of the leading/co leading character relates to box office performance while controlling for a myriad of production, distribution, and exhibition factors. We intend to fill this void by using the Annenberg Inclusion Initiative (AI^2) database of 1,200 top-grossing films from 2007 to 2018. Each year AI^2 examines not only protagonists but every speaking character along a series of demographic metrics. Because the Initiative also collects data on the race/ethnicity of leads/co leads, we were also able to evaluate the prowess of stories with underrepresented protagonists at the center. By collecting additional metrics on every film in the sample, we can test how gender and race/ethnicity of leads and casts as well as a series of other factors affect return on investment.

To keep this complex story simple and straightforward, a few caveats must be noted. First, there are two major financial indicators investigated in this study. Rent, or the dollar amount

studios receive *after* exhibitors take their portion of the box office, is the major outcome variable of interest. Rent was captured from both the domestic and international box office.[2] The variables used in the analyses presented are summarized below but detailed definitions are in the footnotes section of this report.

Our approach to this report is to educate and explain. We walk the reader through a series of simple analytics that provide partial answers to the question of what sells by gender and race/ethnicity in the movie business. By doing such, the reader will be educated on how to think more critically about the financial realities of large budget films based on publically available data. Then, the paper illuminates more comprehensive models of bankability of films with historically marginalized leading characters. Next, we zero in on leads involving women of color and possible reasons why intersectionality is thwarted in story telling. The paper concludes with a summary of findings as well as best practices around green lighting of motion picture content with women and people of color at the helm.

Basic Descriptive Statistics on Inclusion & Financial Performance

We divided up the 1,200 film sample into two silos. The first featured stories with male only leads and co leads (*n*=831) whereas the second featured stories with female leads and co leads (*n*=369).[3] Then, the medians for each group were examined across 5 variables.[4] As shown in Table 1, female-driven films were given smaller production budgets, reduced print and advertising costs (P&A), and were released in fewer theatres domestically than male driven films. Not surprisingly, these films earn less money in domestic rent.[5] The same story emerges internationally for spend on P&A outside the U.S. and the number of territories released internationally. This latter measure is a correlate for distribution density, as there is no current standardized metrics analogous to number of theatres outside the U.S.

Table 1
Median Financials by Gender of Leads Across 1,200 Movies from 2007-2018

Outcome Variable	Male Leads	Female Leads	Difference (M-F)
Production Costs	$59,873,500$_a$	$34,462,000$_b$	-$25,411,500
Dom Prints & Advertising	$44,201,000$_a$	$37,088,000$_b$	-$7,113,000
# of US Theatres	3,237$_a$	3,062$_b$	-175
Domestic Rents	$33,936,560$_a$	$27,685,227$_b$	-$6,251,333

Note: Leads refer to stories with a single protagonist, two roughly equal co leads or stories with ensembles where 50% or more features female actors. Columns with different subscripts are significant at the $p < .05$ level.

Table 2 illuminates that this story is not only limited to female-driven films. The same pattern emerges with underrepresented leads. These stories seem to underperform relative to stories with Caucasian leads. It must be noted that the underrepresented category includes both male and female leads, as the sample size of films driven by women of color was too small to test how gender and race/ethnicity interactively affect financial indicators.[6]

Table 2
Median Financials by Underrepresented Status of Leads Across 1,200 Movies from 2007-2018

Outcome Variable	Caucasian Leads	UR Leads	Difference (C-UR)
Production Costs	$50,735,000$_a$	$35,481,000$_b$	-$15,254,000
Dom Prints & Advertising	$42,525,000$_a$	$37,746,000$_b$	-$4,779,000
# of US Theatres	3,201$_a$	3,016.5$_b$	-184.5
Domestic Rents	$31,576,499$_a$	$29,712,436$_a$	-$1,864,063

Note: Leads refer to stories with a single protagonist, two roughly equal co leads or stories with ensembles where 50% or more features underrepresented actors. Columns with different subscripts are significant at the $p < .05$ level.

Given these statistics, it may seem justifiable that decision makers are reticent to green light movies with female or underrepresented leads. The findings in the tables reveal that stories with male leads/co leads have *stronger* financial and distribution support than stories with female leads/co leads. This begs the question: Is it the gender of the leads/co leads driving return on investment or is the increased financial, marketing, and distribution support behind those films? It is impossible to know the answer from these basic statistics, as gender of leads and financial support are confounded. The same is true for films with underrepresented leads/co leads at the center. They make less money but they are also supported less than films with Caucasian leads/co leads.

Correlations Between Leads & Financial Performance

To answer the above question, we need to turn to different types of statistical tests. Bivariate correlations (*r*) are important as they gauge the relationship between two measures. Positive relationships imply that as one variable increases so does the other. Negative relationships reveal that as one variable increases the other decreases. In addition to the direction, bivariate correlations reveal the size or potency of the relationship (*r*=-1.0 to +1.0) between two measures. Zero reflects no relationship between measures or as one variable changes the other does not or changes in unpredictable ways. Meta-analyses that include thousands of communication studies reveal that in 75% of all studies correlations fall between 0 and ±.30. Therefore, communication researchers consider correlations of up to ±.10 as small effects, correlations between ±.10 and ±.30 as substantial effects, and correlations above ±.30 as strong effects.[7]

Correlations need statistical tests that are based on the assumption of normally distributed data (i.e., the bell curve). However, the distribution of film rent or box office performance is often highly skewed and typically resembles distribution pattern from the family of lognormal distributions. These are distributions where a few films each year are extremely profitable while the vast majority of movies have a small to modest financial return or record a loss. To account for the highly skewed nature of this data, we applied standard procedures for

distribution transformation and the handling of outliers.[8] After that process, we conducted correlations between the female leads/co leads (coded as a 0/no-1/yes indicator variable) and financial performance.

As shown in Table 3, gender of leads/co leads is negatively associated with both financial performance indicators. The two relationships are small and statistically significant (p<.01). Female led films are associated with decreases in rent domestically (r=-.12) and internationally (r=-.13). While informative, this step is still incomplete and does not completely answer the question posed above. What we need is a procedure that will allow us to examine the relationship between the gender of the lead character and financial performance while controlling for or holding constant production costs, print and advertising spend, and distribution density.

This test can be easily accomplished with a partial correlation coefficient. After controlling for relevant production, distribution, and exhibition factors, the relationship between female leads/co leads and financial performance is positive and non significant for domestic and international rent.

Table 3
Correlations between Female Leads & Financial Performance
With and Without Controls

Outcomes	**Female Leads w/o Controls**	**Female Leads w/Controls**
Domestic Rent	-.12**	.02
International Rent	-.13**	.07*

Note: Three variables were applied as controls for domestic rent: production costs, domestic print and advertising spend, and number of theaters. For international rent, the controls were production costs, international print and advertising spend and number of territories.

We repeated the process with underrepresented leads, examining bivariate associations with financial performance indicators and partial correlations with controls (see Table 4). The story is similar but more dramatic. The relationship between underrepresented status and financial performance is negative but not statistically significant across two of the three outcome measures of interest. With controls applied, underrepresented leads are positively and significantly correlated with domestic and international rent.

Table 4
Correlations between Underrepresented Status of Leads & Financial Performance With and Without Controls

Outcomes	UR Leads w/o controls	UR Leads with Controls
Domestic Rent	-.02	.12**
International Rent	-.05	.09**

Note: Three variables were applied as controls for domestic rent: production costs, domestic print and advertising spend, and number of theaters. For international rent, the controls were production costs, international print and advertising spend and number of territories.

Overall, the take away from this section is that correlations between measures reveal an incomplete picture between the identity of the protagonist and financial performance. The findings from the partial correlations suggest the relationship between gender and underrepresented status of leads/co leads and revenue is largely positive but small in terms of potency or the size of the relationship. This makes sense, as many audience members may not decide to attend movies simply because it has a female or underrepresented lead. Matter of fact, our correlations – bivariate and partial – in these analyses fail to account for the important element in any movie: the nature and power of the narrative.

Films are the result of a confluence of factors. From the creative teams that share a vision about a project to the genre and stars behind a story, movies are the convergence of a multitude of factors that can independently or interactively affect financial performance in the U.S. and abroad. Thus, only focusing on a few factors may fail to depict the complexity and richness of variables that drive return on investment.

Path Models Examining Factors Related to Financial Performance in Film

Regression path models enabled us to consider a more comprehensive set of variables while also isolating the effect of gender and race/ethnicity on films' financial performance. Put differently, we could look at the simultaneous effects of many measures on the money made in the U.S. and abroad. Using our database of 1,200 movies from years 2007 to 2018 (12 years), we modeled the influence of well-known predictors of film performance on measures of financial performance as theoretical expectations, previous findings, and the experience of experts in the film business would dictate.

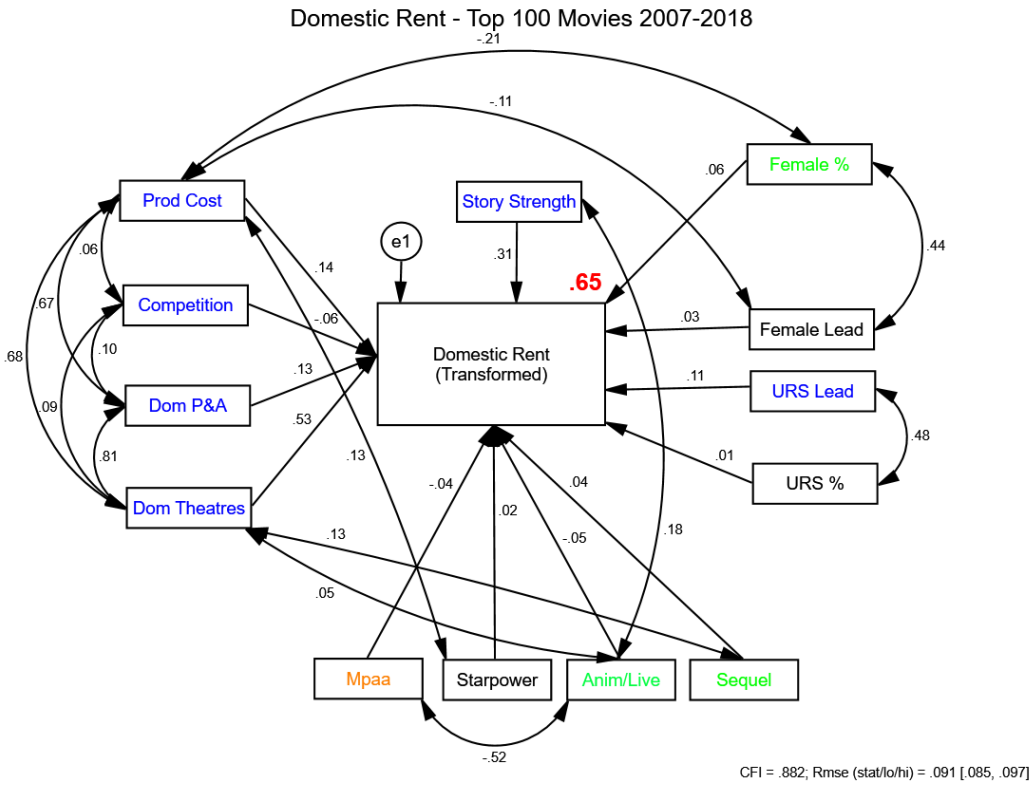
Our final path models are found in Figures 1-3. We looked at a series of variables predicting financial performance ranging from female leads/co leads (0/no, 1/yes), percentage of cast that was female, underrepresented lead/co leads (0/no, 1/yes), percentage of cast that was under-represented, production costs,[9] competition ratio,[10] print and advertising spend in the U.S. and abroad,[11] domestic[12] and international distribution density,[13] MPAA rating,[14] star power,[15] presentation style[16] (animation vs. non-animation), sequel status,[17] and story strength or meta-critics score.[18] For presentation purposes, the central financial performance variable is in the

middle of the table and typical well known drivers are on the left. At the bottom are additional measures that may affect financial performance and inclusion indictors are on the right.[19]

Variables that are significant appear in green (p<.05) and blue (p<.01) and marginally significant measures are in orange (p<.10). A black box illuminates that the effect of a predictor variable on financial performance is *not* statistically significant in the model, that is, the effect may be due to chance. As above, the coefficients on the paths from one variable to financial performance can be positive (increases revenue) or negative (decreases revenue) with an increase in the predictor variable.[20]

In the U.S., what predicts the financial performance of films above and beyond the typical drivers of success such as production costs, competition, advertising, distribution intensity, and story strength (see left side of figure 1)? According to our models,[21] which include the impact these well-known drivers, movies with female representation and underrepresented leads/co leads increase domestic returns (see Figure 1). The percentage of female speaking characters as well as lead characters that belong to an underrepresented racial/ethnic group in top-100 movies show a positive, significant, and consistent impact on domestic theatrical rentals after controlling for production cost, competition, advertising, distribution intensity (widest point of release), and other well-known predictors of success.

Figure 1

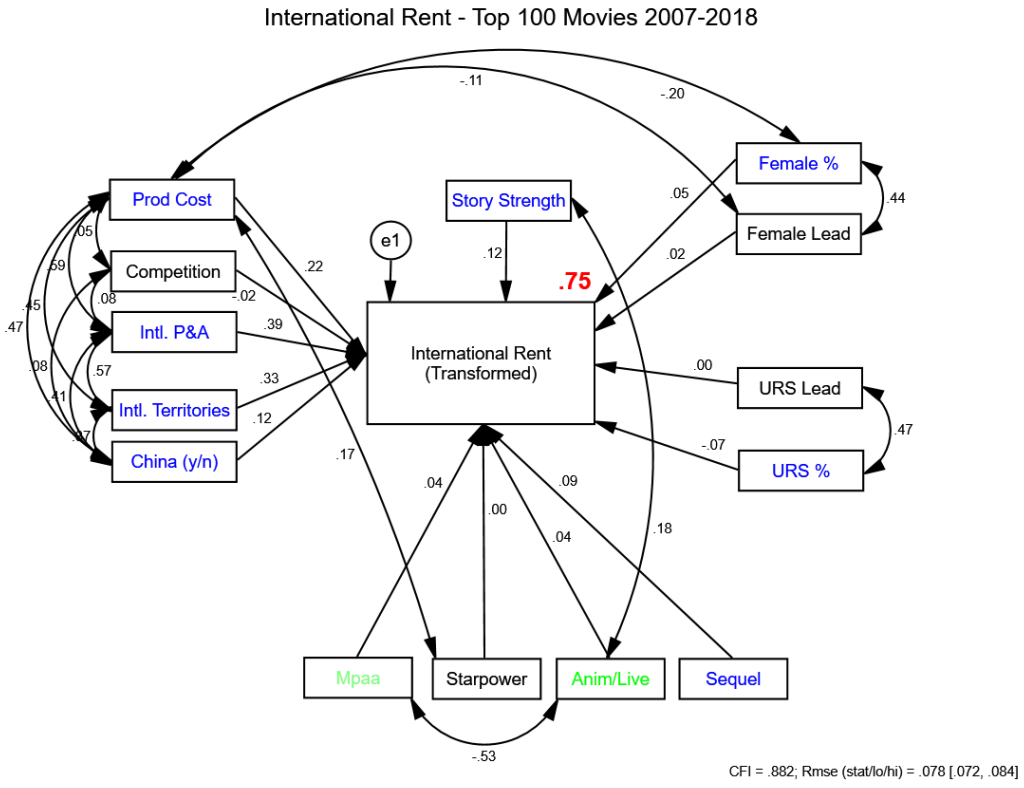


In terms of effect sizes, the impact of female speaking characters is small, but can be compared to the impact of competition, and the impact of underrepresented lead characters can be compared to the effect of advertising on box office and rentals. In other words, ignoring the underrepresented status of lead characters and female representation has a similar negative effect on domestic box office and theatrical rentals as ignoring market competition and advertising.

It should be noted that the strongest predictors of domestic rent are the number of theatres/distribution density, story strength, marketing spend, production costs, and the underrepresented status of leads/co leads. Several other factors were significant in the model, as demonstrated by the green and orange boxes. One factor that was *not* significant is the presence of a female lead or co lead driving the story, which is consistent with an earlier study we conducted on a small sample of films from 2007 (*n*=100).

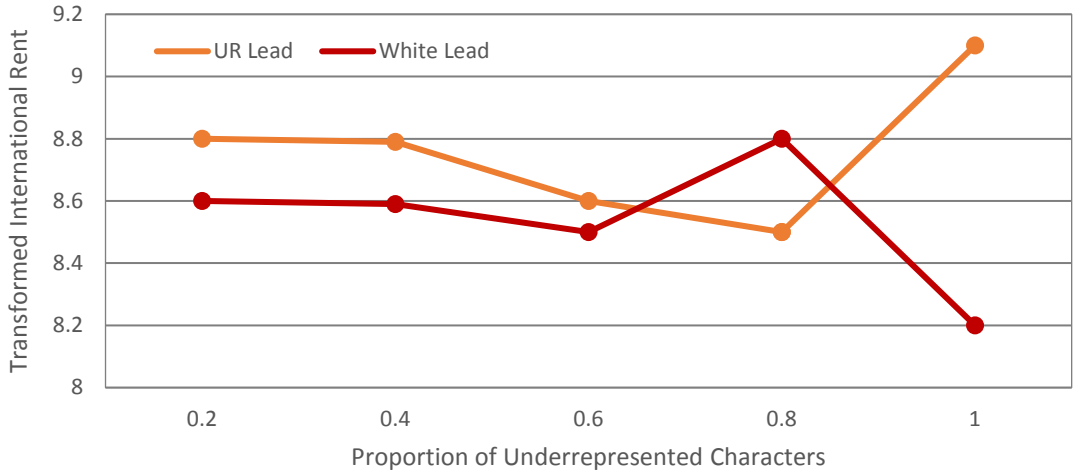
Does the impact of representation change for the international market? A slightly different pattern emerged than above (see Figure 2). After controlling for widely-recognized predictors of financial performance, the effects of female or underrepresented leads/co leads were both not significant. Now, female characters were associated with increases in international rent and underrepresented characters decreases. For films released abroad, the additional significant predictors were production cost, international P&A, number of territories, story strength, China release, and sequel status.

Figure 2



Given that underrepresented leads and characters could be related, we examined the interaction between these two measures more closely. This analysis allowed us to understand how the two were related and their unique and combined impact on international financial performance. It also allowed us to test the longstanding myth that underrepresented films "do not travel well" overseas. The interaction was such that films with a high proportion of underrepresented characters (81% or more) in stories with an underrepresented lead are associated with the highest international revenue. In contrast, films with a high proportion of underrepresented characters (81% or more) but with white leads are associated with the lowest international revenue. See Figure 3. Due to the small sample sizes of both of these types of films, further analyses are needed and this interaction should be interpreted with caution.[22]

Figure 3
International Revenue by Underrepresented Lead Status & Percentage of Underrepresented Characters



Additionally, one important note about the international model is that the effect sizes for the inclusion variables were smaller than those for other factors. For example, the interaction between underrepresented lead and characters explains only 2% of the variance in international rent, while the percentage of female characters explains just 0.7% of the variance. In comparison, international marketing explains 29.6% of the model's variance, 14.8% is explained by the number of international territories where a film is released, 8.6% is explained by production costs, 7.6% by story strength, 5.5% by screening in China, and 5.3% by sequel status. Overall, the support a film receives, along with its release strategy and story strength, is more predictive of its success.

In both models, production costs were *negatively* correlated with female inclusion. Colloquially, our results again show that when money comes in, women are pushed out (U.S. path = -.11/-.21, international path = -.11/-.20). This finding is in line with a previous study in which the

presence of females in behind the camera roles (director, writer, producer) as well as on screen as actors was negatively correlated with production budgets.[23]

Interestingly, there is no substantial correlation between representation of racial/ethnic leads/co leads and production costs. Across all models, the film's story strength or meta critic score was a significant, positive and notable predictor of rent. Good stories make money and have a greater impact than the identity group of the leading/co leading character. However, our models only considered main effects so far (i.e. no interactions with inclusion variables) and we used a composite and indirect measure of story strength (aggregated opinions of film critics after the film has been released). In upcoming studies our team will conduct fine-grained analyses of narrative structures, character relations and conflict in film which will provide deeper insights into the complex interactions between casting decisions and story strength. Finally, in the domestic and international market, star power plays a non significant role in revenue.

The purpose of this report was to investigate whether movies with historically underrepresented leads (women, people of color) are bankable at the box office. By examining multiple factors that contribute to box office performance and using sophisticated analytical procedures, we were able to examine the unique influence of female lead characters on financial gains. The results across both windows (domestic, international) reveal that female lead characters exert small, non-significant influences on revenue. Put differently, there is no added benefit or loss associated with a female lead. Instead, other factors play a role in making movies with females at the center more or less successful—importantly, these variables are within the control of studios and production companies. Ensuring that films featuring females have strong stories, receive budgets that are akin to what films with male leads receive, are supported with advertising spending, and released widely are all actions that influence success. Rather than viewing films starring girls and women as niche, less appealing, or even box office poison, decision-makers may need to critically examine how their own actions hinder the success of these movies.

The case for films with underrepresented leading characters is more complex. Domestically, underrepresented leading characters were associated with increased revenue after controlling for other factors. This relationship did not appear when international financial performance was considered, however. These results suggest that how decision-makers anticipate the performance of films with underrepresented leads may affect the support that is put behind these movies. In particular, the international market is perceived as an arena that will reject movies with underrepresented leading characters. In this analysis, however, no significant positive *or* negative relationship emerged with leads but a small negative impact for underrepresented characters appeared. In the next section, we turn to examine how this perception of the international market particularly affects movies with women of color in leading roles.

A few limitations of this study must be noted. First, the results only apply to the films included in the model, and should not be generalized to all movies. With another sample of films, the

findings could alter. Second, the path models presented in this study offer results that primarily represent linear relationships and main effects. There may be non-linear relationships or interactions between variables that could influence the models specified here. Third, there may be additional factors that could be included in these models that contribute to the financial performance of films. While additional variables were initially investigated, specifying a theoretical and parsimonious model was the goal of this report. Finally, other inclusion factors could not be tested in this model due to small sample sizes or lack of information across all films in the sample. Namely, the influence of portraying specific racial/ethnic groups, individuals with disabilities, or the LGBT community. We implore other researchers to investigate how these indicators contribute to economic success in future studies.

Together, the results in this paper challenge the longstanding perceptions of industry decision-makers that films with white male leads are better positioned to sell domestically and internationally. Instead, this study demonstrates that the factors associated with films starring white males—budgets, advertising, distribution decisions—are the most important contributors to a films' success. By recognizing what actually contributes to financial performance, decision-makers can choose to tell stories with protagonists that better reflect the audiences they serve.

Where are the Women of Color?
Examining the Myths and Practices that Limit Films with Women of Color in the Marketplace

USC Annenberg Inclusion Initiative

Year after year, reports from the Annenberg Inclusion Initiative demonstrate that few women of color appear in leading roles across top films. This is perplexing, as content driven by female characters and underrepresented male leads has shown to be popular globally. Examples include notable properties such as *Beauty and the Beast* and *The Hunger Games* Trilogy, or the franchise hits of the *Fast & Furious* series and international juggernaut *Black Panther.* These films and others have established the audience appeal and financial prowess of movies with leading male characters from underrepresented racial/ethnic groups as well as those starring white women. Yet, given these successes, why are there so few films starring women of color?

The purpose of this paper is to answer that question.[1] One explanation may be found in the realm of financial success. Industry perceptions surrounding whether films with women are profitable may be compounded by beliefs questioning the viability of movies involving people of color. It was crucial for us to apply an intersectional lens to explore perceptions the factors that might contribute to the economic performance of films starring women of color. In particular, we examined empirical evidence that targets the underpinnings of industry beliefs about films starring women of color. Additionally, we scrutinized data collected as part of a larger financial analysis to look at how films with leading women of color fare on specific indicators. Together, these methods offer insight into both industry explanations for the lack of films starring women of color and provide evidence to counter prevailing beliefs.

The Sample

For this analysis, we explored a sample of 1,200 top-grossing movies from 2007 to 2018.[2] Of these movies, we analyzed 817 live action films featuring a single protagonist. A total of 505 were led by white male individuals, 185 movies featured white girls or women at the center, and 93 had boys or men of color in leading roles. Only 34 top-grossing live action films from the last 12 years had a girl or woman of color in a leading role. In the sections that follow, we use this sample to examine several industry perceptions and behaviors that limit the number of films starring women of color in the marketplace.

The International Market is Invoked as an Explanation for Bias

A contributing factor to the lack of films starring women of color is pervasive industry beliefs about the appeal of films starring underrepresented female leads—particularly internationally. The longstanding assumption that overseas audiences are not interested in movies with underrepresented leading characters can be invoked by executives in charge of greenlighting, marketing, or distribution as a reason to limit the number of films starring women of color that are made and released. Below, we review evidence that calls into question not only industry members' perceptions of the international market, but how the internalized and pervasive rhetoric is applied inconsistently across films.

One reason to question the perception that global audiences are not interested in films starring women of color lies in population data. In 2018, China, India, Japan, South Korea, Mexico, Brazil, Indonesia, Argentina, Turkey, and Hong Kong were among the top international territories for film revenue.[3] The majority of the population in each of these top global markets hails from a racial/ethnic group that would be given minority status in the U.S.[4] This begs the question: why would individuals in these territories object to watching stories about women from their own (or even culturally similar) backgrounds?

Research suggests that groups are likely to *desire* storytelling that foregrounds individuals from their own groups. The principle of homophily, or being drawn to similar others,[5] as well as research on social identity processes[6] supports the idea of that individuals should be interested in seeing their own group represented on screen. For example, a study with Arab college students from Palestine, Egypt, and Syria, found that individuals were more interested in viewing TV shows that were produced in an ethnically similar region.[7] Comparable work in an American context reveals that Black participants given a choice of which online news stories to read were more likely to select news stories about Black individuals—either positive or negative—than stories about white individuals.[8] On the other hand, African Americans who have a strong ethnic identity may avoid entertainment—particularly television—as one study has demonstrated.[9] The researchers in that study suggested that this finding may be due to African American's perceptions of television as a medium controlled by white men.

Another indication of international audiences' receptivity to underrepresented female leads is found in locally produced content. A recent study of the 10 highest-grossing films across the 11

top film markets worldwide examined the gender of leading characters. The results demonstrate that women do sell in these markets. For example, 50% of the Korean films studied had a female lead or co lead character, as did 40% of Chinese films, and 40% of Japanese movies.[10] It seems that what is successful in export markets is not persuasive to American moviemakers.

The disparity between the aforementioned data and reality is even more apparent when the racial/ethnic background of female leading characters in the movies included in this study is taken into account. Of the 34 women of color in leading roles, 47.1% are from multiracial/other backgrounds, 35.3% are Black/African American, 14.7% are Latina, and 2.9% are Asian. Notably solo female leads who are American Indian/Alaska Native, Native Hawaiian/Pacific Islander, and Middle Eastern/North African are missing from live action popular films. If Hollywood truly desired to serve the international market, then why would it not produce more content featuring women whose cultural heritage is aligned with the top markets it aims to serve?

This question is even more relevant when we consider one specific global market: China. As a territory, China has grown in influence and profitability.[11] In 2018, China recorded $9 billion in box office sales, compared to $11.9 billion in the U.S. and Canada.[12] It is a key export venue for U.S. content, and one that looms large in mythologizing about economic factors related to inclusion. A total of 249 films of the 817 examined (30.5%) were released in China. Of those, 69.9% (*n*=174) had white male leads, 19.3% (*n*=48) had white female leads, and 9.6% (*n*=24) of had underrepresented male leads. Just 1.2% or 3 films starring women of color between 2007 and 2018 were released in Chinese theaters. Perhaps this merely reflects the oft-repeated Hollywood myth that international audiences don't want to see films about people of color. Yet, if this is the case, why did companies release a greater share of films with underrepresented male leads in the same time frame?

Moreover, the rhetoric that certain demographic groups will not fare well in this market is also curiously applied to films with male and female leads. Two of the three films with female leads of color distributed in China featured an actor of Asian descent in the main role.[13] However, 25% of films (*n*=6) with male leads of color distributed in China featured an actor of Asian descent in a leading role. The gap between movies with male and female leads of color suggests that myths about audience preferences are invoked disproportionately against films with female rather than male leads.

One long-held industry belief is that films starring individuals from underrepresented racial/ethnic groups will face difficulty in overseas markets.[14] However, the data presented here reveal two important things. First, that the myth is applied to movies about underrepresented male and female actors inconsistently. Second, that this perception fails to take into account either population demographics or the likelihood that audiences in desired and lucrative markets might want to see films with leading characters that resemble themselves. In the next section, we explore another explanation for the lack of films with leading women of color: financial support.

Financial Support Fluctuates for Movies with Women of Color

We saw in the first section that executives limit the potential for revenue of films starring women due to their perceptions of the international market. As such, we wanted to explore how the expectation of revenue might influence the support that these films receive before they are released theatrically. By exploring the value that executives place on movies featuring women of color, we can understand why more of these movies are not made. In this section, we ask: are movies with underrepresented female leads valued in the same way as movies starring white female, underrepresented male, or white male leads?

To answer this question, we utilized the sample of 817 live action movies with a solo leading character, examining films with underrepresented female leads, white female leads, underrepresented male leads, and white male leads. For each group we assessed the production costs (budget) associated with films in each of these four categories.[15]

Table 1 indicates the differences in production costs by race/ethnicity and gender of leads. Across two measures of central tendency (mean, median), films with underrepresented female leads received lower production costs than those with white females, underrepresented males, or white male leads.

Table 1
Production Cost by Race/Ethnicity and Gender of Lead

	UR Female	White Female	UR Male	White Male
Mean	$26,673,588.24	$48,096,048.65	$60,417,623.66	$76,228,243.56
Median	$19,232,500	$31,280,000	$38,505,000	$51,995,000
Number of Films	34	185	93	505

As with any product, one important contributor to the financial success of a movie is the advertising and marketing support it receives. Advertising may vary, however, especially for films with underrepresented leading characters in overseas territories. For example, two recent films were critiqued for how they portrayed central characters. Movie posters aimed at Asian markets that depicted the character of *Black Panther* with a mask were derided for hiding Chadwick Boseman's face.[16] In Italian markets, ads for *12 Years a Slave* were recalled after audiences noted that white actors were given more prominent placement than Chiwetel Ejiofor, who played the film's lead character.[17] To further understand how marketing support is awarded to movies, we examined differences in the domestic and international spending behind films with women of color in leading roles, as well as those featuring white women, men of color, and white men.

Table 2 reveals how much is spent to promote movies domestically per the identity of the lead character. In the U.S., films starring women of color receive less support than those with white female, underrepresented male, or white male leads. Marketing is crucial to ensuring that

audiences are aware of a film—movies featuring women of color are clearly not promoted with the same resources as those starring their peers.

Table 2
Domestic Print & Advertising Spending by Race/Ethnicity and Gender of Lead

	UR Female	White Female	UR Male	White Male
Mean	$32,990,852.94	$38,257,691.89	$39,779,741.94	$43,865,332.67
Median	$29,696,000	$35,696,000	$38,718,000	$43,529,000
Number of Films	34	185	93	505

This trend continued when we examined international print and advertising costs. Films with white female, underrepresented male, and white male leads were given more marketing support on average, at the mean and median level than those with underrepresented females (see Table 3). From this evidence it is clear that when a woman of color is in a leading role, the film will typically receive less marketing support than a movie starring her white female, underrepresented male, or white male peers.

Table 3
International Print & Advertising Spending by Race/Ethnicity and Gender of Lead

	UR Female	White Female	UR Male	White Male
Mean	$17,173,782.66	$24,406,978.50	$26,761,532.49	$30,799,044.44
Median	$14,294,870	$18,957,152	$21,194,046	$24,046,788
Number of Films	32	185	91	504

In addition to international marketing spending, the number of territories in which a film is released indicates expectations or promotion for the film. Table 4 indicates how films with underrepresented female leads stack up against those with white males and females and underrepresented males. Films with underrepresented female leads fall behind the other three groups across all measures. Notably, of the 5 films that did not receive international distribution, four involved underrepresented lead characters (2 underrepresented male leads; 2 underrepresented female leads). The remaining film starred a white male lead. The lack of international theatrical distribution for films starring women of color may reduce the revenue that these films produce for distributors, and contribute to beliefs about the potential success of these movies.

Table 4
Number of International Territories by Race/Ethnicity and Gender of Lead

	UR Female	White Female	UR Male	White Male
Mean	33.84	47.35	42.67	49.47
Median	33	51	47.5	52
Number of Films	32	185	92	505

Specific international territories were also examined. In addition to China (noted earlier), the top international territories in 2018 (based on MPAA data) were examined. See Table 5. Less than 5% of the films distributed in each of the top 10 international territories featured underrepresented female leads. Instead, the majority of movies given international releases were those with white males at the center, followed by white females, and then underrepresented males. Films starring women of color not only go to fewer territories overall, they are less likely than films featuring their white male or female or underrepresented male counterparts to be shown in top global markets.

Table 5
Top International Territories by Race/Ethnicity and Gender of Lead

	UR Female	White Female	UR Male	White Male
China	1.2% (*n*=3)	19.3% (*n*=48)	9.6% (*n*=24)	69.9% (*n*=174)
Japan	1.7% (*n*=9)	20.3% (*n*=107)	10.8% (*n*=57)	67.2% (*n*=355)
U.K.	3.3% (*n*=26)	23.2% (*n*=183)	10.3% (*n*=81)	63.2% (*n*=499)
South Korea	1.8% (*n*=11)	24.1% (*n*=145)	9.3% (*n*=56)	64.8% (*n*=391)
France	2.8% (*n*=20)	22% (*n*=157)	10.2% (*n*=73)	65% (*n*=465)
India	1.8% (*n*=7)	19.5% (*n*=75)	11.5% (*n*=44)	67.2% (*n*=258)
Germany	3.2% (*n*=24)	23.3% (*n*=177)	10.3% (*n*=78)	63.2% (*n*=480)
Australia	2.8% (*n*=21)	23.3% (*n*=174)	10% (*n*=75)	63.9% (*n*=478)
Mexico	3.1% (*n*=23)	22.4% (*n*=167)	10.1% (*n*=75)	64.4% (*n*=480)
Russia	3.1% (*n*=22)	23.2% (*n*=167)	9.6% (*n*=69)	64.2% (*n*=463)

Two other factors were explored that relate to the potential success of films: sequel status and genre. Of the 170 sequels with a single protagonist released between 2007 and 2018, 65.3% (*n*=111) had white male leads, 21.8% (*n*=37) had white female leads, and 12.3% (*n*=21) had underrepresented male leads. Only one sequel featured an underrepresented female lead (0.6%). From these figures, it is clear that women of color are not included in franchise or sequel films that can generate considerable revenue.

Looking to genre, of the 167 action movies in the sample, 76.7% (*n*=128) had white male leads, 16.2% (*n*=27) had underrepresented male leads, 6% (*n*=10) had white female leads, and 1.2% or

2 films had an underrepresented female lead. Sci-Fi/Fantasy films had a similar distribution, with only 1 film (0.8%) starring an underrepresented female lead in this genre in contrast to 88 with white men (72.7%) in the lead. White females led 24 (19.8%) sci-fi/fantasy films, while underrepresented males starred in 8 (6.6%). Underrepresented females are left out of two genres that are often some of the most lucrative worldwide.

Support for movies can also come in other forms. One example of this is critical reviews. As a source of feedback on the story, acting, filmmaking, and even enjoyment potential, reviews can play an important role in how films are received. This is of particular relevance when considering films with women of color in leading roles, given their reduced marketing support. Across the 300 top-grossing films from 2015 to 2017, white male critics rated movies with underrepresented female leads lower on average than underrepresented female critics did.[18] The two groups did not differ on their ratings of films with white male leads. This pattern held when examining how many films were awarded the "fresh" designation on the review aggregation website, Rotten Tomatoes. White male reviewers rated 59.2% of films with underrepresented female leads "fresh" while underrepresented female critics did so for 81.1% of these movies. Given that underrepresented female critics comprised just 4% of all reviewers across these 300 movies, the likelihood that movies by women of color will find support from demographically similar critics is small.

From this section, it is clear that movies starring women of color are often placed on a different production, distribution and exhibition trajectory than those starring their white female or underrepresented male counterparts. Whether in the form of project budgets, marketing support, or critics reviews, films with underrepresented female leads do not receive the same advantages as other movies to find audiences and to succeed.

Audience Malleability and Global Trends

It is clear that the perceptions of decision-makers regarding audience tastes and preferences have served to limit the number of films starring women of color released both domestically and internationally. This adherence to what has worked in the past may be done at the expense of what is happening in the present, or the potential benefits of a different approach. In this section, we explore global trends that illuminate where the film industry lags behind, and how entertainment itself may be a vehicle to alter attitudes and perceptions.

Global trends can urge a shift in Hollywood's decision-making, which is evident from its sister industries: fashion and music. Across these two businesses, the move toward inclusion is undeniable. In Spring 2019, 36.1% of casting spots went to racially diverse models across shows and runways in Paris, Milan, London, and New York. This is the highest percentage since measurement began in 2015, when 17% of models were from underrepresented racial/ethnic backgrounds.[19] While Milan still lags behind the other cities and New York leads, all but one show included in the study featured at least one model of color. Of the 10 top models to walk the runways in Spring 2019, half were women of color.[20] Though there is room for

improvement, particularly in the European shows, the effort to cast models of color suggests that fashion has recognized its biases and is acting to change them.

Another counterpoint comes from the massive global success of hip hop music and artists. In 2017, 4 of the IFPI's top 10 global artists were from underrepresented racial/ethnic groups (Drake, Kendrick Lamar, Bruno Mars, The Weeknd). In 2016, the number was 5 (Drake, Beyoncé, Rihanna, Prince, The Weeknd), including 2 women of color.[21] In an IFPI survey of 19,000 participants from 18 countries, 26% listed hip hop/rap/trap music among their most listened-to genres.[22] In the same vein, according to Spotify, reggaeton music may have been launched in Colombia and Puerto Rico but 95% of streams of this genre now happen outside of those original countries, spreading to nations across Europe and Asia.[23] In addition to these metrics, scholars have written about the transnational flow of hip hop culture, which originated in New York and has become appropriated and localized by individuals around the world.[24] Music rooted in African American and Latin cultures is successful in some of the very markets that industry members view as inaccessible to films featuring actors from these backgrounds.

Beyond international trends in music and fashion, decision-makers seem also to discount the idea that entertainment itself can produce changes in attitudes or beliefs. One area which provides evidence to counter industry beliefs about entrenched attitudes among audiences is the field of entertainment education. By using storytelling to illuminate cultural issues, entertainment education deploys targeted messages and solutions to influence beliefs and behaviors of individuals who listen or see the story. For example, radio dramas or TV programs in countries worldwide have been used as a tool to encourage HIV prevention, reduce stigma surrounding HIV, endorse family planning, and promote domestic violence awareness and intervenion.[25] Entertainment education reveals that entertainment can be used to alter the way that people think about a topic, and to encourage broader cultural change.

The influence of entertainment is not only found in the health domain. Researchers in the U.S. have demonstrated that college students who viewed programming featuring portrayals of individuals from Muslim communities interacting with Christians were more likely to express a willingness to engage with Muslims. Participants exposed to these documentary-style portrayals also reported less prejudice than a control group immediately after watching the video.[26] In another study, watching a film about the difficult experience of immigrating to a new country was associated with more positive attitudes toward immigration for participants, even compared to viewing a movie that focused on positive relationships between immigrants and locals.[27] A final example comes from the U.S., where watching the TV program *Will & Grace* was associated with more positive attitudes toward gay males, particularly in the absence of real-life connections to members of the LGBT community.[28] These studies demonstrate that films need not only be guided by the status quo but may be a crucial part of changing the very attitudes and beliefs that decision-makers may perceive to limit their appeal.

This evidence is bolstered by other findings that suggest the characters of American productions are not the propellant behind entertainment's appeal. While involvement with characters was related to enjoyment for Chinese viewers of Korean TV dramas, the narrative

complexity of American TV series was associated with Chinese viewers' enjoyment of the shows.[29] Story strength is a strong predictor of international success for films.[30] Thus, under certain circumstances character-related attributes may drive viewership, but storytelling influences may be important as well.

Two primary conclusions are clear from this section: audience preferences are neither immutable nor averse to diversity and inclusion. As Hollywood decision-makers cling to beliefs about how audiences will react to storytelling about women of color, they miss opportunities to create shifts in attitudes and perceptions. Moreover, they fail to capitalize on global trends toward inclusivity in related industries. While more research is needed to chart international changes and preferences, it is clear that international bias as a justification to tell stories that exclude women of color is becoming a flimsy excuse.

Conclusion

The purpose of this section was to investigate the lack of films starring women of color released between 2007 and 2018. In particular, the goal was to reveal where decision-making biases may contribute to the deficiency of these movies. Through the insights of industry members as well as a look at data specifically about films featuring women of color this paper reveals several trends.

First, beliefs about the global population affect the fortunes of movies with women of color at the center. Despite population trends and the success of locally produced content, the biases held by decision-makers thwart the potential that movies about girls and women from underrepresented backgrounds have in the global market. One crucial means of upending the aging myths about international audiences is to collect current data on audience preferences. Data on moviegoing provides limited insights into consumer behavior—understanding the global ticket-buyer likely requires more sophisticated data collection, analysis, and strategy. Instead of relying on what films have brought audiences to the box office in the past, Hollywood can look to new ideas and better insights to establish its future.

Second, films with women of color in leading roles are shortchanged from the outset. Production and marketing budgets lag behind those of their white female and underrepresented male counterparts. These metrics are critical components of a movie's potential success.[31] By restricting the support that films with women of color receive, decision-makers may also be confining the success that these movies will have. Moreover, these smaller production budgets point to potential pay disparities facing women of color—even when their work is comparable to their contemporaries.

Third, the inertia represented by the number of films with underrepresented female leads reveals a lack of imagination on the part of Hollywood leaders. Ample evidence exists of the power of entertainment to change attitudes and beliefs. Yet, the persistent reliance on outdated beliefs—including those regarding the impermeability of cultural preferences—

suggests that decision-makers may doubt the influence of their own products. By looking toward related industries of fashion and music, it is clear that global tastes are not inflexible. Hollywood can take an active role in altering how its output will be received in the future by making different choices in the present.

At the beginning of this section, we noted that films featuring women of color in leading roles could face barriers related to both the gender and race of their leading characters. It is clear that real intersectional impediments to the creation and success of movies with underrepresented females at the center exist and are perpetuated. By exploring evidence that contradicts the approach decision-makers have taken for decades, it is clear that another way forward is possible. Removing the obstacles that films about women of color face not only creates an avenue for more of these movies to exist and thrive. It also opens up opportunities for audiences around the world to see and appreciate new narratives and new ways of thinking.

Footnotes (The Ticket to Inclusion):

1. Lauzen, M. (2008). *Women @ the Box Office: A Study of the 100 Top Worldwide Grossing Films*. Center for the Study of Women in TV and Film. San Diego State University, San Diego, CA. Smith, S.L., Weber, R., & Choueiti, M. (2010, August). *Female characters and financial performance: An analysis of 100 top-grossing films at the box office and DVD sales.* Paper presented at a poster session at the annual conference of the Association for Education in Journalism and Mass Communication. Denver, CO. CAA, shift7 (2018). Press release. Retrieved from: https://shift7.com/media-research. Geena Davis Institute on Gender in Media. (2018). *The See Jane 100*. Los Angeles, CA.

2. Data for several of the predictive and outcome measures were purchased from SNL Kagan, a division of S&P Global Market Intelligence. These measures were: Theatrical Domestic Rentals, Theatrical International Rentals, Merchandising/Other Revenue, Total Revenue, Production cost, Domestic Print and Advertising, and International Print and Advertising.

Theatrical Domestic Rentals were defined as "Revenue generated from the fees theaters pay to rent a film's print for U.S. exhibition." In other words, this indicator is the dollar amount the studio receives after exhibitors takes their portion of the box office. *Theatrical International Rentals* reflect the same definition for worldwide exhibition. *Merchandising/Other Revenue* was defined as "revenue derived from licensing the property for toys, t-shirts, video games, book adaptations, live plays, film clips, etc." *Total Revenue* consists of the dollar amount of all revenue each film received. *Production cost* was defined as "Direct costs related to the creation of a film" and was provided in U.S. Dollars. *Domestic Print and Advertising* are "Costs related to the creation of film prints and advertisements for a film within the U.S." in U.S. Dollars. *International Print and Advertising* is defined similarly, but for global release. Definitions are cited from personal communication with SNL Kagan representatives, as well as the S&P Global Market Intelligence web database (available: https://www.spglobal.com/marketintelligence/en/)

Data were sourced using S&P Global's methodology. Per S&P Global, "Box office and related data sources are from Box Office Essentials™, a product of Comscore Inc. and The Numbers, powered by OpusData. We also utilize data from publicly available sources, industry contacts, trusted industry publications and information gleaned from consulting projects to populate our film database and inform our industry projections. We do not provide specifics into our contacts and methodology as that is proprietary company information." Personal communication, March 25, 2019.

To understand the relationship between publicly available box office data and measures of domestic rent provided by S&P Global, a Pearson Correlation test was computed. The relationship between rent and box office was perfect (r=.99, $p < .01$). That is, our results for domestic rent can be applied to domestic box office.

3. *Female lead, Co Lead, Ensemble Lead, and Underrepresented lead, Co Lead, Ensemble Lead.* These indicators capture the gender and race/ethnicity of the actor in the leading role, or actors in the co leading roles or in the ensemble. Over the past 12 years, our team of researchers classified each movie for *lead* based on the overall story and central characters' role, story arc, and purpose in the plot. Each film was watched by at least one member of the team and deliberated with one of the study's authors. We supplemented lead analyses with critics' reviews, plot summaries, and other material about a film online (e.g., interviews with cast and crew). Patterns showed that the lead(s) almost consistently

appears within the first 5 minutes of the film and then overlaps continuously with the central theme(s) of the movie to its end.

Films were categorized by gender of lead(s) into one of ten values: *Solo Male*, *Solo Female*, *Male/Male*, *Female/Female*, *Male/Female*, *Half Female/Half Male Ensemble*, *Majority Male Ensemble*, *Majority Female Ensemble*, *All Male Ensemble*, and *All Female Ensemble*). This measure was simplified into a Female Lead present or absent dichotomy where *Solo Female*, *Female/Female*, *Male/Female*, *Half Female/Half Male Ensemble*, *Majority Female Ensemble*, and *All Female Ensemble* were counted as female led films.

For Race/Ethnicity of the lead, movies were sorted based on the White/Caucasian vs Underrepresented status (*Hispanic/Latino, Black/African American, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Asian/Southeast Asian, Middle Eastern, and Mixed Race/Ethnicity*) of the lead(s) into one of ten values: *Solo White*, *Solo UR*, *White / White*, *UR / UR*, *White / UR*, *Half UR /Half White Ensemble*, *Majority White Ensemble*, *Majority UR Ensemble*, *All White Ensemble*, and *All UR Ensemble*). This measure was simplified into a Underrepresented Lead present or absent dichotomy where *Solo UR*, *UR/UR*, *White/UR*, *Half UR/Half White Ensemble*, *Majority UR Ensemble*, and *All UR Ensemble* were counted as underrepresented led films.

4. Median values are less sensitive to extreme scores across a distribution, while average (mean) scores can be affected by outliers. Given the range of values across the outcome revenue variables and the presence of outlier scores, medians were the appropriate measure of central tendency to use in this analysis. See Field, A. (2009). *Discovering Statistics Using SPSS*. SAGE Publications.

5. Statistically significant results indicate that the probability of achieving the result of a statistical test is due to chance in a certain percentage of cases. For example, significance levels of <.05 reflect that a result would be achieved due to chance less than 5% of the time. When the probability of a result occurring due to chance is less than 5%, this gives researchers confidence that the observed finding is not just a random result in one particular sample. Throughout this paper, we use significance levels of .05 and .01 to reflect significant results, while .10 is used to reflect marginally significant outcomes. For more information, see Field, A. (2009).

In Table 1, values with the same subscripts are not significantly different from each other; that is, there is a high likelihood that differences are due to chance. Values with different subscripts (a, b) are significantly different at the p<.05 level, which indicates that these differences are due to chance in less than 5% of cases.

6. Across the sample only 58 films (4.8%) featured an underrepresented female lead, co lead, or ensemble (half or majority). Of these, 49 were lead or co leads and 9 were ensemble films.

7. Rains, S. A., Levine, T. R., & Weber, R. (2018). Sixty years of quantitative communication research summarized: Lessons from 149 meta-analyses. *Annals of the International Communication Association*. 42(2), 105-124.

8. We applied standard transformation and outlier correction procedures prior to modeling to make sure that results are unaffected by distribution anomalies.

9. The money spent on making the film. Purchased from a large-scale database, which defines this indicator as "Direct costs related to the creation of a film" in U.S. Dollars (email, S&L Kagan).

10. This competition score accounts for the domestic box office performance of the top five films in relation to all box office receipts for a week of release (Friday to Thursday) per film. This includes up to eight weeks in 2019 when top films from late 2018 were still in theaters. We collected up to 15 weekly competition scores per film reflecting week 1 to week 15 if films were in theaters fifteen weeks or more domestically. We assembled data for each film's total weeks in release ***OR*** its first 15 weeks of release, whichever came first. The decision to use a 15-week cut-off was derived from finding the average number of weeks in release for the dataset of films from 2007-17.

This analysis was performed on a per week basis. For any given week, the total dollar amount for the five films that earned the most revenue for that week was first tallied (the numerator). To create a competition score for a film ranked below the 5 top positions, this number was divided by the total revenue earned that week of all films in theaters (the denominator). For a film ranked 1 to 5 for that particular week, the revenue of that film is excluded from both the numerator and denominator to calculate the competition score for that movie.

11. The money spent on printing copies of the film and marketing materials for movie's release. Purchased from a large-scale database, which defines this indicator as "Costs related to the creation of film prints and advertisements for a film within the U.S." in U.S. Dollars.

12. Domestic distribution density is defined as, per film, the highest number of theaters at any moment the film was screened.

13. We were unable to obtain distribution density for international theaters, so we calculated how many international territories exhibited the film. Data on international territories were collected from the website BoxOfficeMojo.com per film. Territories were collapsed to maintain mutual exclusivity in instances where BoxOfficeMojo listed the same territory in conjunction with other territories.

14. The film's rating by the Motion Picture Association of America. https://filmratings.com/ Data were collected as part of AII's annual report on top grossing films. Films in the sample are rated *G*, *PG*, *PG-13*, and *R*.

15. This indicator measures the "bankability" of leading or co leading actors on the film. For each film in the study with a lead or co lead, we need to count (minimum 0, maximum 3) how many times that actor was a lead or co lead in the 15 top films of each of the previous 3 years (so, across 45 films). The higher number was used in films with leads that had different star power scores.

16. Using data from multiple sources (genre from Variety Insight, data collected as part of AII's annual top grossing film study), films were categorized as either *animation* or *live action*. Films with a combination of both presentation styles were forced (based on how much of each type were shown) into one of the two categories.

17. Studio System and Variety Insight labels of "Sequel" and "Sequel/Prequel/Reboot" were used to determine *sequel status*.

18. Metacritic scores (0-100) were obtained for each film in the analysis and used as an indicator of critical rating. Per their site, the Metacritic process is to "… carefully curate a large group of the world's most respected critics, assign scores to their reviews, and apply a weighted average to summarize the range of their opinions." Metacritic.com. How We Create the Metascore Magic. Retrieved from: https://www.metacritic.com/about-metascores

19. Drivers, measures, and variables are all synonyms referring to predictor indicators that may be related to a financial performance criterion.

20. To increase readability, we eliminated consistently irrelevant effect coefficients and co-variances among variables in the models (i.e. effects and co-variances that are consistently close to zero) while maintaining effect estimates' overall stability for all relevant model parameters. In addition, we optimized the balance between the models' predictive accuracy and their fit to the underlying database.

21. Domestically, our models explain 65%-71% of top-100 films' financial performance. Internationally, this prediction accuracy increases to 75%-77%. All models fitted well (CFI from 0.88 to 0.91; RMSE around 0.08).

22. To understand why the models demonstrated a positive effect of an underrepresented lead character but a significant negative effect of the percentage of underrepresented characters overall, we further tested an interaction between these two variables (UR Lead Character and UR Character Ratio). This revealed a significant interaction, F=3.75, df=4, p<.01. Further examination showed that the interaction seems primarily driven by movies in the two highest percentage groups, that is, by movies with a ratio of either 0.6 to 0.8 of UR characters (n=27 of 1200) or 0.8 to 1 (n=25 of 1200).

22. Cerridwen, A., & Simonton, D.K. (2009). Sex doesn't sell—nor impress! Content, box office, critics, and awards in mainstream cinema. *Psychology of Aesthetics, Creativity, and the Arts, 3(4)*, 200.

Footnotes (Where are the Women of Color):

1. The report includes insights gleaned from interviews with 7 industry professionals that focused on why few films with women of color are released each year. Brief interviews were conducted with the 7 individuals, who worked in various positions across the film industry. These interviews took place in Fall 2018. Individuals were asked about why there were so few films with underrepresented female leads, film distribution and marketing, storylines, source material, and how films with underrepresented female leads are perceived in the marketplace.

2. The data and sample in this report are derived from the Annenberg Inclusion Initiative's longitudinal sample of top-grossing film content, spanning the 100 top films each year (based on domestic box office) from 2007 to 2018. That sample was used to construct a database utilized in the larger study to examine the economic performance of the 1,200 movies. For this report, the sample is reduced to 817 films based on the criteria included in the text (live action, solo lead). The determination of the leading character was based on the work of the Annenberg Inclusion Initiative over the past 12 years.

3. Motion Picture Association of America. (2019). 2018 Theme Report. Available: https://www.mpaa.org/wp-content/uploads/2019/03/MPAA-THEME-Report-2018.pdf

4. Population statistics are sourced from the Central Intelligence Agency Factbook for each country. Available: https://www.cia.gov/library/publications/resources/the-world-factbook/.

5. For definitional information on this topic see, Ibarra, H. (1992). Homophily and differential returns: Sex differences in network structure and access in an advertising firm. *Administrative science quarterly*, 422-447.

6. Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In S. Worchel & W. G. Austin (Eds.), *The social psychology of intergroup relations* (pp. 33 47). Monterey, CA: Brooks Cole

7. Kharroub, T. & Weaver, A.J. (2019). Selective exposure and perceived identification with characters in transnational Arabic television. *International Journal of Communication, 13,* 653-673.

8. Appiah, O., Knobloch-Westerwick, S., & Alter, S. (2013). Ingroup favoritism and outgroup derogation: Effects of news valence, character race, and recipient race on selective news reading. *Journal of Communication*, *63*(3), 517-534. Knobloch-Westerwick, S., Appiah, O., & Alter, S. (2008). News selection patterns as a function of race: The discerning minority and the indiscriminating majority. *Media Psychology*, *11*(3), 400-417.

9. Abrams, J.R. & Giles, H. (2007). Ethnic identity gratifications selection and avoidance by African Americans: A group vitality and social identity gratifications perspective. *Media Psychology, 9*(1), 115-134.

10. Smith, S.L., Choueiti, M., & Pieper, K. (2014). Gender Bias Without Borders. Report prepared for the Geena Davis Institute on Gender in Media. Available: https://annenberg.usc.edu/sites/default/files/MDSCI_Gender_Bias_Without_Borders_Executive_Summary.pdf

11. Barraclough, E. (2016, April). The rise of China's film industry. *WIPO Magazine.* https://www.wipo.int/wipo_magazine/en/2016/02/article_0004.html. Deloitte Global (2017). China's Film Industry—A New Era. Available: https://www2.deloitte.com/content/dam/Deloitte/cn/Documents/technology-media-telecommunications/deloitte-cn-tmt-china-film-industry-en-161223.pdf.

12. MPAA (2018).

13. These films were *Crazy Rich Asians* and *Bumblebee.*

14. Anderson, T. (2017, March 24). Disproving the 'black films don't travel' Hollywood myth. *Los Angeles Times.* https://www.latimes.com/entertainment/movies/la-et-mn-black-movies-global-audience-myth-20170324-story.html. Barnes, B. (2018, Feb. 15). 'Black Panther' Poised to Shatter a Hollywood Myth. *New York Times.* https://www.nytimes.com/2018/02/15/business/media/black-panther-hollywood-diversity.html.

15. Data on production budgets and print and advertising costs in this section are sourced from the larger data set that was used for the full economic analysis. Details on data collection and information sources are included in earlier footnotes.

16. See, for example, Arnold, B. (2018). *Outrage Over 'Black Panther' Poster Isn't All it Seems. Yahoo! Entertainment*. Available: https://www.yahoo.com/entertainment/outrage-chinese-poster-black-panther-isnt-seems-111825970.html

17. Child, B. (2013). *Italian Posters for 12 Years a Slave Herald Brad Pitt Over Chiwetel Ejiofor. The Guardian.* Available: https://www.theguardian.com/film/2013/dec/24/12-years-slave-italy-posters-pitt-ejiofor. Variety Staff (2013, December 23). Lionsgate Vows to Recall Italy's '12 Years a Slave' Poster Focusing on Bradd Pitt. *Variety.* Available: https://variety.com/2013/film/news/italys-12-years-a-slave-poster-favors-brad-pitt-over-black-star-1200990875/

18. Choueiti, M., Smith, S.L., and Pieper, K. (2018). Critic's Choice 2. Annenberg Inclusion Initiative, University of Southern California. http://assets.uscannenberg.org/docs/critics-choice-2.pdf

19. Tai, C. (2019). Diversity Report: The Spring 2019 Runways Were the Most Diverse Ever, but Europe Still Has a Major Age and Body Diversity Problem. *The Fashion Spot.* https://www.thefashionspot.com/runway-news/807483-spring-2019-runway-diversity-report/

20. Tai, C. (2019).

21. IFPI (2018). Global Music Report 2018: Annual State of the Industry. Available: https://www.ifpi.org/downloads/GMR2018.pdf

22. IFPI (2018). Music Consumer Insight Report 2018. Available: https://www.ifpi.org/downloads/music-consumer-insight-report-2018.pdf

23. Van Buskirk, E. (2017). How Reggaeton Became a Global Phenomenon on Spotify. *Spotify Insights*. Available: https://insights.spotify.com/us/2017/09/05/how-reggaeton-became-a-global-phenomenon-on-spotify/

24. Hooton, C. (2015). *Hip-hop is the most listened to genre in the world, according to Spotify analysis of 20 billion tracks. The Independent.* Available: https://www.independent.co.uk/arts-entertainment/music/news/hip-hop-is-the-most-listened-to-genre-in-the-world-according-to-spotify-analysis-of-20-billion-10388091.html. Chang, J., & Watkins, S. C. (2007). It's a Hip-hop World. *Foreign Policy*, (163), 58. Morgan, M., & Bennett, D. (2011). Hip-hop & the global imprint of a black cultural form. *Daedalus*, *140*(2), 176-196.

25. Smith, R. A., Downs, E., & Witte, K. (2007). Drama theory and entertainment education: Exploring the effects of a radio drama on behavioral intentions to limit HIV transmission in Ethiopia. *Communication Monographs*, *74*(2), 133-153. Rogers, E.M., Vaughan, P.W., Swalehe, R.M., Rao, N., Svenkerud, P., & Sood, S. (1999). Effects of an entertainment-education radio soap opera on family planning behavior in Tanzania. *Studies in family planning*, *30*(3), 193-211. O'Leary, A., Kennedy, M., Pappas–DeLuca, K.A., Nkete, M., Beck, V., & Galavotti, C. (2007). Association Between Exposure to an HIV Story Line in The Bold and the Beautiful and HIV–Related Stigma in Botswana. *AIDS Education & Prevention*, *19*(3), 209-217. Usdin, S., Singhal, A., Shongwe, T., Goldstein, S., & Shabalala, A. (2004). No Short Cuts in Entertainment Education: Designing *Soul City* Step-by-Step. In A. Singhal, M.J. Cody, E.M. Rogers, & M. Sabido (Eds.) *Entertainment-Education and Social Change: History, Research, and Practice.* Mahwah, NJ: Lawrence Elbaum Associates.

26. Moyer-Gusé, E., Dale, K.R., & Ortiz, M. (2018). Reducing Prejudice Through Narratives: An Examination of the Mechanisms of Vicarious Intergroup Contact. *Journal of Media Psychology: Theories, Methods, and Applications,* Advance online publication.

27. Igartua, J.J., & Frutos, F.J. (2017). Enhancing attitudes toward stigmatized groups with movies: Mediating and moderating processes of narrative persuasion. *International Journal of Communication, 11*(20), 158-177.

28. Schiappa, E., Gregg, P.B., & Hewes, D.E. (2006). Can one TV show make a difference? A Will & Grace and the parasocial contact hypothesis. *Journal of Homosexuality*, 51(4), 15-37.

29. Lu, J., Liu, X., & Cheng, Y. (2019). Cultural Proximity and Genre Proximity: How Do Chinese Viewers Enjoy American and Korean TV Dramas? *SAGE Open*, *9*(1), 2158244018825027.

30. Story strength was a significant, positive predictor of both domestic and international rent in models created using the data included in this report.

31. Production and marketing costs were significant and positive predictors of domestic and international rent in analyses conducted on this data set.

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Thank you to our entire research team. So many of you have contributed such great work over the years and this would not be possible without all of you.

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