



Geena Davis Institute on Gender in Media

Gender Roles & Occupations: A Look at Character Attributes and Job-Related Aspirations in Film and Television

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Our earlier research shows that gender roles are still stereotyped in entertainment popular with children.¹ For example, female characters in feature films populate less than 30% of all speaking roles. A slightly better percentage emerges across our research on gender roles in children's television programming. Not only are on screen females present less frequently than on screen males, they are often sexualized, domesticated, and sometimes lack gainful employment.

To illustrate this last point, our recent analysis² of every first run general audience film ($n=21$) theatrically released between September 2006 and September 2009 reveals that a higher percentage of males (57.8%) than females (31.6%) are depicted with an occupation. While females hold marginally more professional jobs than their male counterparts (24.6% vs. 20.9%), women are noticeably absent in some of the most prestigious occupational posts. Across more than 300 speaking characters, not one female is depicted in the medical sciences (e.g., doctor, veterinarian), executive business suites (e.g., CEO, CFO), legal world (e.g., attorney, judge), or political arena. More optimistically, 6 of the 65 working females (9%) are shown with a job in the hard sciences or as pilots/astronauts.

These findings suggest that females have not shattered as many glass ceilings in the "reel" world as one might suspect. If recent G-rated movies stereotype aspirations and occupations along gender lines, how are current PG and PG-13 rated family films performing? What about children's shows or prime-time TV? These questions are crucial as media exposure not only contributes to children's and/or emerging adults' occupational socialization, but also sex-role stereotyping, self objectification, and body dissatisfaction.³

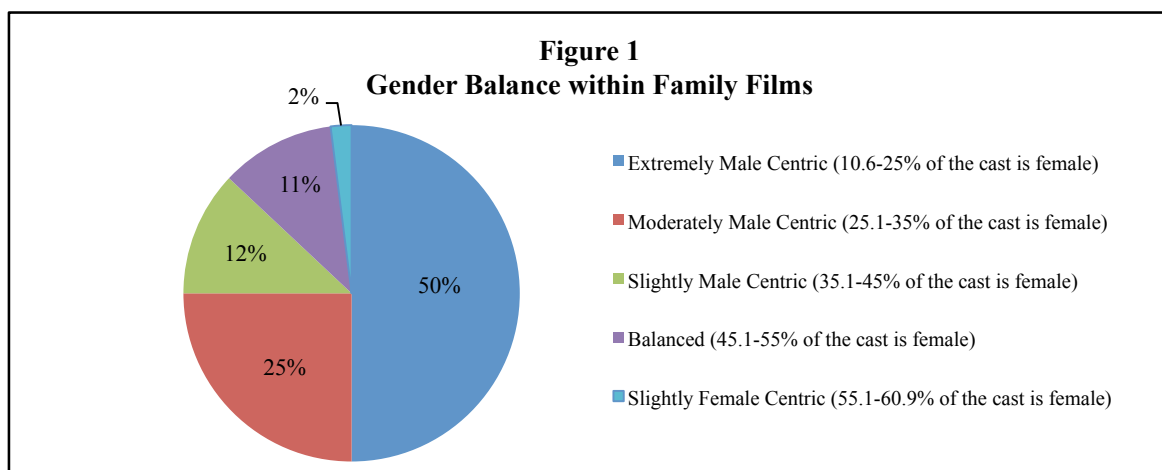
The purpose of the present study is to content analyze gender roles in popular family films (G, PG, PG-13), prime-time programs (drama, reality shows, comedy, children's series, news magazines), and children's TV shows. Toward this goal, we focus on scrutinizing three specific types of information. First, we assess the prevalence of male and female speaking characters in popular media. Second, we examine the nature of those portrayals by capturing common media stereotypes (e.g., demography, domesticity, sexualization) associated with male and female speaking characters. Third, we measure the occupational pursuits of characters and the degree to which males and females are shown working in a variety of prestigious industries and STEM careers (e.g., science, technology, engineering, and mathematics).

Our coding instrument and approach remain similar across media, allowing for cross platform comparisons.⁴ A mix of quantitative and qualitative methods are employed. Within medium, we overview our analysis of family films, prime-time programs, and then children's TV shows. The major unit of analysis is the independent speaking character. We capture every character that speaks one or more words discernibly on screen or is referred to by name. For quantitative analyses, only statistical ($p < .05$) and meaningful differences (5% or greater gap between percentages) are noted below. Qualitative results are summarized by trends. The methodology pertaining to this study is detailed in the notes section of this report. In total, 11,927 characters, 129 G, PG, and PG-13 films, 275 prime-time programs, and 36 children's shows are evaluated in the present multi-method investigation.

Family Films

Based on U.S. domestic box office gross, the sample includes 100 of the most popular PG and PG-13 rated films theatrically released between September 5th, 2006 and September 5th, 2011.⁵ Every fictional first run G-rated film ($n=29$) released within this time frame also is assessed.⁶ For franchise films, only the highest performer is included in the sample.⁷ Together, a total of 129 G, PG, and PG-13 rated family films are analyzed (see Appendix A for list of movies). Now, we overview the findings in four specific areas: prevalence of males and females on screen, gendered nature of common media stereotypes, occupational pursuits, and STEM careers.

Prevalence. Across 5,839 independent speaking characters, only 28.3% are females.⁸ Put differently, 71.7% of coded characters are male. This translates into 2.53 on screen males to every 1 on screen female. The percentage of on screen females in this study deviates little from our other research. For instance, one study of 400 popular films released between 1990 and 2006 finds that 27% of characters are female. Another study assessing 122 family films in theatres between 2006 and 2009 shows that females account for 29.2% of speaking characters.⁹ Clearly, there has been no meaningful change in the percentage of female speaking characters in popular films.



Gender prevalence varies by MPAA rating.¹⁰ Females are more likely to appear in G rated films (31.6% of all speaking characters) than in PG-13 rated films (26.5% of all speaking characters).

The percentage of girls and women in PG rated films (28.9%) does not deviate from the other ratings by 5%, the criterion used here for detecting meaningful differences between proportions.

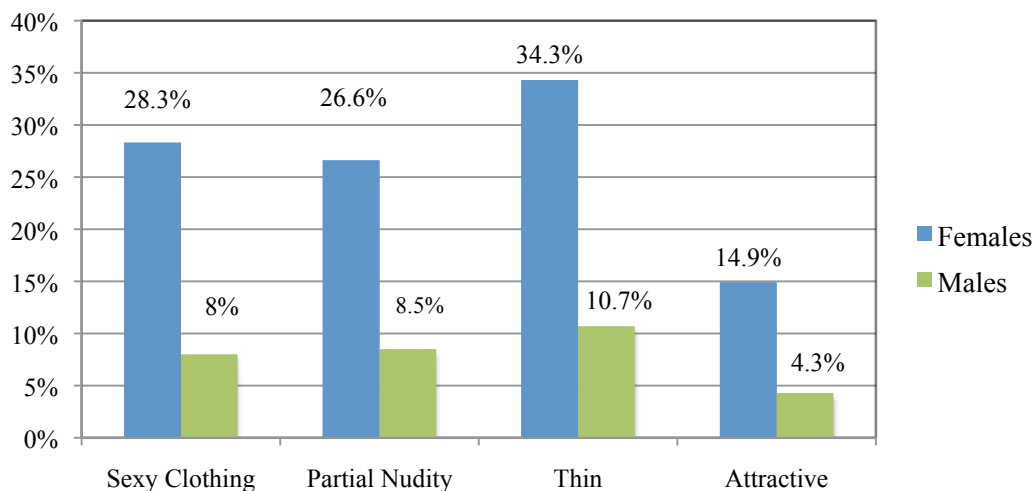
Another way to examine gender prevalence is to assess the number of films featuring "balanced" casts. A balanced cast is present when a screenplay depicts girls and women in roughly half of all speaking roles. To assess this, we calculate the percentage of females per story and then group the movies into categories based on the percentage of girls and women on screen. Films with females occupying 25% or less of the cast are "extremely male centric." "Moderately" male centric films depict females in 25.1% to 35% of all roles, whereas "slightly" male centric films show them in 35.1% to 45% of all roles. "Balanced" films show girls and women in 45.1% to 55% of the speaking cast. Though infrequent, some movies show females more than males. We use the same scale to assess films that depict more girls/women than boys/men.

How balanced are family films in our sample? Not very. As shown in Figure 1, only 11% ($n=14$) of movies in the sample are balanced and three of those are G rated. Three films (2%) are "slightly female centric," including girls and women in more than 55% of all speaking roles. The vast majority of films are male centric (87%), featuring "slightly" to "extremely" more boys/men than girls/women in the storylines.

Two additional prevalence indicators are captured: the gender of lead characters and narrators. Lead characters are those protagonists that drive the unfolding storyline. Some movies are "buddy films," depicting two or more characters on the same journey. When this occurs, the co leads are both selected as story protagonists. Less than a quarter of the films (23.3%) portray a female lead or co lead. A total of 49 films feature a narrator guiding the storyline. Only 26.5% of the narrators are female.

In sum, the prevalence findings show that females are grossly under represented on screen in family films. The trends are troubling, given that females represent over half of the U.S. population and purchase half of all movie tickets sold.¹¹

Figure 2
Hypersexuality Measures by Character Gender in Family Films



Stereotypes. Three common stereotypes associated with gender roles in the media are assessed: demographics (e.g., age, ethnicity), domesticity (e.g., parental status, romantic relationship), and sexualization (e.g., sexy attire, nudity, thinness, attractiveness).¹² In terms of demographics, the apparent race/ethnicity of characters is not associated with gender.

Family films are washed in white, with 78% of all characters coded as Caucasian. Eleven percent of characters are Black, 4.5% Hispanic, and 5.1% Asian. Other ethnicities represent less than 2% of all speaking characters. Examining just females, however, there may be some interesting patterns of on screen representation. Just over one-third of Asian characters (34.5%) are females, the highest percentage of any racial/ethnic group. Other groups seem to cluster around 30% (i.e., Black=30.2%, Hispanic=28.5%) while in the "other" category, a mere 18.7% of characters are female.

In contrast to ethnicity, apparent age is gendered in family films.¹³ Females are more likely to be depicted as teenagers (11.1%) than are males (5.7%). The gender trend reverses for middle-aged characters, however. Males are more likely than females to be depicted between 40 and 64 years of age (32.4% vs. 19.3%, respectively). A clear age-based double standard in Hollywood exists, with females prized for their youthfulness more than males. As a result, female actors face a shorter on screen shelf life than male actors in motion pictures. It must be noted that a few of the age categories do not differ by 5%. Males are no more likely than females to be depicted on screen between 0 and 11 years of age (males=7.5% vs. females=11.2%), 21 and 39 years of age (males=49.3% vs. females=52.1%), or 65 years of age or older (males=5.1%, females=6.3%).

At least two forms of traditional gender roles are alive and well in family films.¹⁴ Females are more likely than males to be depicted as caregivers, legal guardians, or step/biological parents (females=56% vs. males=44.1%). Similar findings emerge for relational status, with women more likely than men to be shown in a committed romantic relationship (females=65.7% vs. males=54.1%). Such lopsided portrayals not only undercut boys' and girls' ability to see males in a range of nurturing roles but they may also reinforce viewers' perceptions that matters of heart and home are gender linked.

Table 1
Hypersexuality Measures by Female Characters' Age in Family Films

	Teen 13-20 yrs	Young Adult 21-39 yrs	Middle Age 40-64 yrs
Sexy Clothing	31.6%	37.5%	21.9%
Some Nudity	31.6%	34.5%	21.6%
Thin	49.6%	41.3%	16.5%
Beautiful	23.3%	19%	8.3%

Note: Only characters with bodies approximating the human form are included in these analyses. The percentages reflect the proportion of all females within an age category shown with sexy clothes, exposed skin, thin, or beautiful.

Sexualization also is associated with gender.¹⁵ As depicted in Figure 2, females are more likely than males to be represented in sexually revealing attire (28.3% vs. 8%) and partially naked (26.6% vs. 8.5%) or showing some exposed skin in the cleavage, midriff, or buttocks section of

the body. Girls and women also are more likely than boys and men to be thin (34.3% vs. 10.7%) and referred to as physically attractive (14.9% vs. 4.3%) across the context of the plot. These findings are problematic, as studies show that exposure to thin media can increase females' internalization of the thin ideal and body dissatisfaction¹⁶ whereas viewing sexualized content may heighten self objectification, body shame, and appearance anxiety.¹⁷

Given the concern surrounding girls and body image,¹⁸ we look specifically at the relationship between our sexualization measures and females' age. Only females within three age groups are included in the analyses:¹⁹ teens (13-20 years old), young adults (21-39 years old), and middle aged (40-64 years old). Among females in these age groupings (see Table 1), young adults (37.5%) are more likely to be shown in sexualized apparel than are teens (31.6%). Teens, in turn, are more likely to be depicted in scanty attire than are middle aged women (21.9%). No meaningful differences in nudity and physical beauty are observed among females 13 to 20 years of age and females 21 to 39 years of age. When compared to young adults (41.3%), female teens are more likely to be skinny (49.6%) whereas middle aged females are less likely (16.5%) to be.

Summing up, three common gender stereotypes appear in family films. Females are more likely than males to be shown as young, sexy and in a domestic light. As we have argued before, such findings suggest potentially two archetypical female characters in film: the sex pot (young/sexualized) and the sex not (wife/mother). These portrayals may not only reinforce traditional gender roles but illuminate that girls and women are valued for how they look rather than who they are or what they do, a trend that will clearly emerge in the next section of the report.

Table 2
Character Occupation by Gender in Family Films

	Males	Females	Total
Management	12.8% (n=329)	8.4% (n=54)	11.9% (n=383)
Professional	23.1% (n=593)	39.6% (n=254)	26.4% (n= 847)
Service	25.9% (n=663)	23.5% (n=151)	25.4% (n=814)
Sales	3.9% (n=101)	5.5% (n=35)	4.2% (n=136)
Administration	1.8% (n=47)	10.7% (n=69)	3.6% (n=116)
Military	13.3% (n=341)	5% (n=32)	11.6% (n=373)
Crime	10.1% (n=258)	3.6% (n=23)	8.8% (n=281)
Other	9% (n=232)	3.7% (n=24)	8% (n=256)
Total	100% (n=2,564)	100% (n=642)	100% (n=3,206)

Note: The job classification scheme is adapted and modified from the BLS Occupational Outlook Handbook (2010-11). Our original 13 level scheme is collapsed into the eight categories above due to the infrequency of certain groups depicted (e.g., farming, maintenance/repair, construction, production, transportation). The columns feature the distribution of all working females and males by major group. The rows capture the frequency of male and female employees within a particular industry.

Occupation. Over half of the characters (60.8%) in the sample of family films are employed. To examine the relationship between gender and occupations, we asked two questions. First, what percentage of all males and all females are shown working in family films? The results show that a higher percentage of males (66.6%) versus females (45.3%) are depicted with a

job.²⁰ Out of the 1,469 females evaluated on this variable, less than half possess a career or occupation. As a point of contrast, two thirds of the males assessed on this variable ($n=3,921$) are portrayed working.

The second question asked: what is the percentage of males and females in the total employment pool? Female characters comprise only 20.3% of those employed. Males, on the other hand, occupy 79.7% of all jobs. This is surprising given that females embodied 47% of the U.S. labor force in 2011.²¹

In addition to prevalence, we assess the types of jobs males and females hold in G, PG, and PG-13 rated movies. The Bureau of Labor Statistics (BLS) Occupational Outlook Handbook scheme (2010-11) was adapted and modified for this investigation. Each job is categorized into one of eight mutually exclusive categories: (1) management (i.e., executives, managers, supervisors); (2) professional (i.e., doctors, lawyers, scientists, talent); (3) service (i.e., law enforcement, food and recreation service); (4) sales (i.e., real estate agents, retail, models); (5) administration (i.e., assistants, clerks, secretaries); (6) military (i.e., domestic/foreign armed forces); (7) crime (i.e., bank robber, shoplifter, trafficker); and (8) other (i.e., production, construction, maintenance, farming, transportation).

The analysis reveals that occupational groupings vary by gender (see Table 2).²² Females are more likely than their male counterparts to be in the professional sphere (e.g., nurses, teachers) or involved in administration (e.g., secretaries, clerks). It is interesting to note that administration is the only major group where females make up a larger proportion of the workforce than do males, which is presumably due to the low status and gendered nature of secretarial or clerical work. Out of 116 characters, females comprise 59.5% of the total administrative labor market.

Males are more likely than females to be shown working in two careers: the armed forces and crime. In fact, the ratio of males to females in both the military and criminal workforce is over 10 to 1. An additional three occupational groups (i.e., management, service, sales) do not deviate significantly by gender. Yet within each of these job-related categories, males are more frequently portrayed than females. Finally, males are more likely than females to be shown in "other" occupations. This category is filled with many traditionally masculine jobs, such as farming/fishing/forestry, maintenance/installation/repair, production, construction and transportation.

To get a more detailed account of characters' occupations on screen, we qualitatively examine jobs across eight different cultural sectors.²³ The White House Project Report²⁴ and BLS Occupational Outlook Handbook guide the industries selected. Then, the clout associated with each job is assessed. Clout is a relative concept and is determined by leadership ranking of job title *within* each industry and the types of occupations coded. Some top leadership positions may not appear completely analogous to "real world" titles because: 1) the characters are featured in fictionalized or fantastic worlds; 2) the actual senior or top positions do not appear in the sample (i.e., University President, Surgeon General); and/or 3) the time frame of the story occurs in the distant past or future.

(See special insert Table 3)

The sector analysis reveals three major trends (see Table 3).²⁵ The first trend is that females are noticeably absent from the upper echelons of power across multiple industries. Not one woman is present at the top of the business/financial sector (e.g., financiers, senior economic officials), the legal arena (e.g., attorney generals, chief justices), or the field of journalism (e.g., editor in chief). Among the 58 top executives portrayed in the corporate suite (e.g., CEOs, CFOs, Presidents, VPs, General Managers), only two are female. In comparison, the Bureau of Labor Statistics show that females comprised 25.5% of chief executives in 2010.²⁶

Only three female characters are at the pinnacle of the political sphere, two U.S. Representatives (that do not speak on screen but are *only* referred to by name) and one German Chancellor. All three of these characters are inconsequential to the stories they populate. Thus, not one speaking character plays a powerful American female political figure across 5,839 speaking characters in 129 family films. Men, however, hold over 45 prestigious U.S. political positions (i.e., President, Vice President, Chief of Staff, Advisors, Senators, Representatives, Mayors, Governors). Rounding out these gender disparities, only 3 of the 19 attorneys are female and 2 of the 8 judges.

Females do achieve some level of credibility or authority in films. Females hold 38.5% of school administration positions (e.g., principals, directors). Yet these appointments are at the high school level or below and elsewhere only two females are portrayed as University professors. Women infiltrate some of the ranks of journalism, comprising 46.4% of reporters, photojournalists, editors, and producers. As noted above, however, females have not shattered the glass ceiling as "editor in chief." Females are on par with males as small business owners in the media, entertainment, and art/design industry. Though visible as operational staff, working females in family films are stuck on the lower rungs of the labor ladder.

Third, a great deal of stereotyping is present on screen in work force hierarchies. A surplus of females are coded in traditional jobs: 1) teachers of elementary, junior high, or high school students (59%) in academia; 2) nurses/social workers/therapists (64.6%) or aides/caregivers (85%) in healthcare; and 3) staff/administrative assistants/receptionists in politics (57.9%), law (100%), and journalism (66.7%).

Taken together, the labor market in family films is filled with traditional roles and stereotyping. While females represent almost half the work force in the U.S., they fill only a fifth of the occupations depicted on screen and many of those jobs lack power and prestige. Very few females are shown in high-ranking leadership positions, which severely limits the range and complexity of aspirational role models for young female viewers.

STEM. Another occupation sector involving cultural cachet is STEM. Quantitatively, a total of 160 characters with an identifiable gender hold careers in science, technology, engineering or math, which accounts for 4.9% of the total on screen labor market. This statistic mirrors real world estimates, as 5.3% of jobs in 2009 were classified as STEM.²⁷

Less than a fifth (16.3%) of all STEM characters are women (see Table 4). Stated differently, males hold 83.8% (134 characters) of all STEM jobs sample-wide. This calculates into a ratio of

over 5 male STEM characters to every 1 female STEM character. No female protagonists or co leads are shown with STEM careers whereas there are 14 male protagonists or co leads with STEM careers.

Table 4
STEM Fields by Gender in Family Films

	Males	Females	Total
% w/STEM career	83.8% (n=134)	16.3% (n=26)	160
% of main characters w/STEM	100% (n=14)	0	14
% in life/physical science	49.3% (n=66)	65.4% (n=17)	83
% in computer science	23.1% (n=31)	7.7% (n=2)	33
% in engineering	19.4% (n=26)	7.7% (n=2)	28
% of other STEM jobs	8.2% (n=11)	19.2% (n=5)	16

Note: Other is used when a character's occupational portrayal made it impossible to ascertain which of two STEM categories to use (e.g., physical science vs. engineering). At analysis, mathematics is collapsed into "other" given that only two characters (one male and one female) are shown working in this arena.

Types of on screen STEM jobs vary with gender.²⁸ As shown in Table 4, within gender, the percentages of type of STEM job sum to equal 100%. Among both males (49.3%) and females (65.4%), the most frequently depicted STEM jobs are within the life/physical sciences. However, females are more likely to be shown working in this arena than are males. Examples of jobs held by females in the life sciences category include zoologists, botanists, or cell biologists. Some life scientists are clearly depicted but their specific STEM field is not stated. Others' careers align squarely in the physical sciences, with females playing different types of physicists.

With regard to other types of STEM jobs, on screen males are more likely than on screen females to be depicted in the fields of computer science and engineering, vocations in the real world that are traditionally masculine in nature. Parenthetically, it is interesting to note that the most frequently depicted STEM field in family films is the life/physical sciences. Yet computer science and mathematics comprise the largest percentage of the U.S. STEM workforce.²⁹

The above analysis examines the distribution of STEM jobs *within* gender. Now, we turn our attention to an analysis of gender *within* types of STEM jobs. Even though female characters infiltrated the life/physical sciences arena, males are almost 4 times as likely as females to be shown on screen in this line of work (66 males vs. 17 females). Summing across computer science and engineering, the ratio of males (57) to females (4) in these arenas is 14.25 to 1!

The results of the film analyses show gross under and misrepresentation of girls and women in popular G, PG, and PG-13 rated films. Females are shown far less frequently on screen than are their male counterparts. When depicted, females are often portrayed in a sexy or stereotypical light. Although 45.3% of all female speaking characters are shown working, only a fifth of the entire on screen work force is female. Further, females are noticeably absent from the corridors of clout in multiple industries: journalism, business/finance, and law. Only a few make it to the pinnacle of power in politics or the C-suite and a small minority are STEM. There is no

shortage, however, of female teachers, nurses/social workers/therapists, or administrative assistants. The lack of egalitarianism in family films deviates significantly from what we found in prime time, which we turn to now.

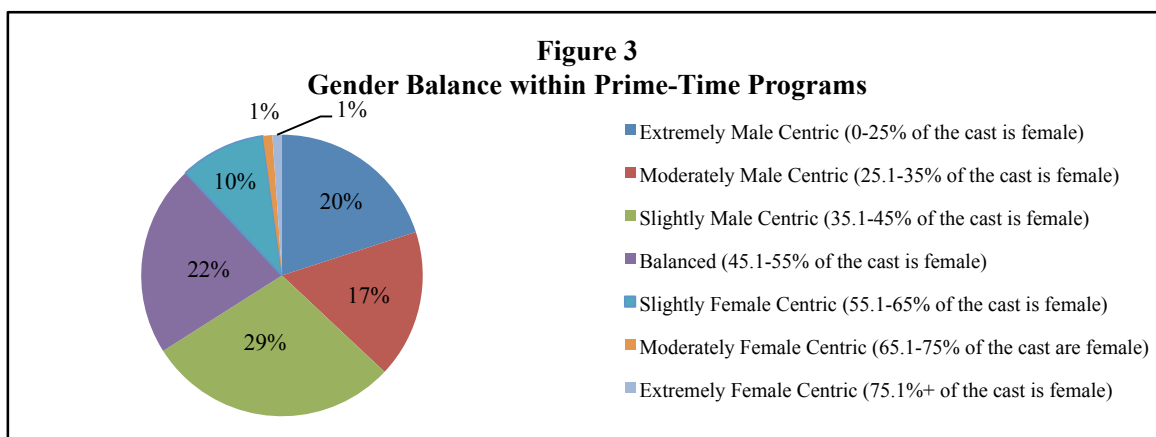
Prime-Time Programs

Using a purposive sampling method, approximately a week of prime-time programming across 10 popular broadcast (ABC, NBC, CBS, Fox, CW) and cable (Cartoon Network, Disney, Nickelodeon, E!, MTV) channels is assessed.³⁰ In general, shows in the sample are from series regularly airing between February 6th and March 4th 2012. Several types of programs are excluded from analysis, despite initial inclusion in the sample: breaking news, sports, movies, specials, award shows, and programs with an atypical duration within a series (i.e., double length, condensed broadcast). After exclusions, 275 repeatedly scheduled TV shows are included in the sample from scripted and reality-based broadcast and cable programming. For a complete breakdown of the shows within channel, see Appendix B. The same variables outlined in the last section are used to overview prime-time findings on gender prevalence, common stereotypes, occupations, and STEM.³¹

Table 5
Gender Prevalence by Program Genre in Prime Time

	Drama	Comedy	Reality	News Magazine	Children's	Total
Males	59.7%	68.5%	51.9%	53.4%	69.5%	61.1%
Females	40.3%	31.5%	48.1%	46.6%	30.5%	38.9%
# of Characters	905	1,609	1,676	399	931	5,520

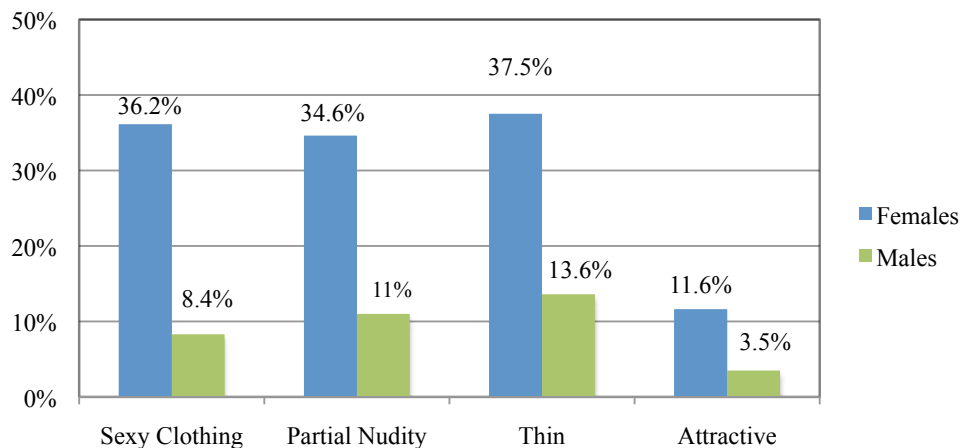
Prevalence. Within 275 prime-time shows, females account for 38.9% of the 5,520 characters with an identifiable gender. Males encompass 61.1% of all speaking characters. This calculates into a ratio of 1.57 males to every 1 female. Gender prevalence varies by genre (see Table 5).³² Near parity can be found in news magazines and reality shows. Children's programs and comedy series are the most imbalanced genres in prime time, with less than a third of all speaking characters coded female.



Examining gender-balance (see Figure 3), 22% of prime-time programs depict girls or women in roughly half of all speaking parts (45.1% to 55%). A fifth of the programs are “extremely” male centric, depicting females in 25% or less of all roles. Every program in the sample featured male characters, whereas girls/women are completely absent from two. Twelve percent of the programs are “female centric” in prime time, featuring girls/women in over 55% of roles. Only 15% ($n=43$) of the program segments feature a narrator guiding viewers through the unfolding story.³³ A full 44.2% of narrators are female.

In totality, prime time seems to be doing a "fair" to "good" job presenting a realistic portrayal of gender. While not fully equitable, the findings do suggest that two genres are largely responsible for the lack of parity in prime time: comedy series and children's shows.

Figure 4
Hypersexuality Measures by Character Gender in Prime Time



Stereotyping. Focusing on demographics, characters' age differs by gender.³⁴ Females are more likely than males to be shown as teens (19.2% vs. 12.8%) and young adults (55.2% vs. 49.4%). Males are more likely than females, however, to be shown between 40 and 64 years of age (29.1% of males vs. 19.3% of females). Gender differences do not emerge among child (5.3%, 4.2%, respectively) or elderly (3.4%, 2.0% respectively) characters.

Similar to family films, ethnicity does not meaningfully vary with gender.³⁵ Over three quarters (77.8%) of prime-time characters are Caucasian, 12.8% are Black, 5.3% are Hispanic, 3% are Asian, and 1.1% are from “other” ethnicities. Although not assessed for differences, female representation in racial/ethnic groups shows positive signs of gender balance. The lowest percentage of females occurs in the category for “other” ethnic groups (29.8%) followed by Caucasian females (39.9%). However, among Black, Hispanic, and Asian characters, the percentage of females ranged from a low of 42.1% (Hispanic) to a high of 45.3% (Black).

Assessing domestic variables, no gender differences are observed in parental or relationship status. Nearly two-thirds of characters are shown as parents or caregivers (60.6%) and just over three-fourths are shown in committed romantic relationships (75.2%).

Table 6
Hypersexuality Measures by Female Characters' Age in Prime Time

	Teen 13-20 yrs	Young Adult 21-39 yrs	Middle Age 40-64 yrs
Sexy Clothing	30.8%	45.5%	26.5%
Some Nudity	26.9%	43.6%	26%
Thin	52.2%	40%	16.2%
Beautiful	11.4%	14.3%	5.8%

Note: Only characters whose bodies approximate the human form are included in these analyses. The percentages reflect the proportion of all females within an age category shown with sexy clothes, exposed skin, thin, or beautiful.

Turning to sexualization (see Figure 4), gender is associated with all four appearance indicators.³⁶ Females are more likely than their male counterparts to be portrayed scantily clad (36.2% vs. 8.4%), showing exposed skin (34.6% vs. 11%), thin (37.5% vs. 13.6%), and as physically attractive (11.6% vs. 3.5%). These trends, in conjunction with the age-based findings above, illuminate that prime-time females are valued more than prime-time males for their looks, youthfulness, and sexy demeanor.

Similar to family films, we examine the percentage of teen, young adult, and middle aged females across the four appearance measures. As shown in Table 6, young adult females are more likely than teen or middle aged females to be shown in sexy attire or partially naked.³⁷ Thinness is inversely related to females' age, with over half of all teens (52.2%), 40% of young adults, and 16.2% of those who are middle aged shown thin. Female teens (11.4%) and young adults (14.3%) are more likely than middle agers (5.8%) to be depicted in an attractive light. These findings suggest that 21-39 year old females are more likely than teens to be the focus of sexualization in prime time.

Occupation. Half of prime-time speaking characters (50.5%) possess an identifiable job, with 44.3% of females and 54.5% of males gainfully employed.³⁸ Of the total on screen labor force, females hold 34.4% of all jobs. As depicted in Table 7, occupational grouping varies with gender.³⁹ Males are more likely to be found in the business/management arena than are females. Females, on the other hand, are more likely than their male colleagues to work in professional contexts or sales. Meaningful gender differences (5% or greater) do not emerge across the remaining job clusters. Prime time seems to embrace more work-force egalitarianism than family films, as two traditionally gendered occupations in the real world (i.e., military, administration) do not differ on screen by characters' sex.

Table 7
Character Occupation by Gender in Prime Time

	Males	Females	Total
Management	13.4% (n=227)	7.2% (n=64)	11.3% (n=291)
Professional	45.9% (n=777)	53.4% (n=475)	48.5% (n=1,252)
Service	21.8% (n=369)	19.1% (n=170)	20.9% (n=539)
Sales	4.8% (n=81)	12.5% (n=111)	7.4% (n=192)
Administration	2.2% (n=38)	4.9% (n=44)	3.2% (n=82)
Military	4.1% (n=70)	.9% (n=8)	3% (n=78)
Crime	3% (n=51)	.2% (n=2)	2.1% (n=53)
Other	4.7% (n=79)	1.8% (n=16)	3.7% (n=95)
Total	100% (n=1,692)	100% (n=890)	100% (n=2,582)

Note: The job classification scheme is adapted and modified from the BLS Occupational Outlook Handbook (2010-11). Our original 13 level scheme is collapsed into the eight categories above due to the infrequency of certain groups depicted (e.g., farming, maintenance/repair, construction, production, transportation). The columns feature the distribution of all working females and males by major group. The rows capture the frequency of male and female employees within a particular industry.

The gender distribution across and within industry sectors is notable in four ways (see Table 8). First, females are noticeably *present* in the highest clout positions across all but one of the eight industry sectors. Women hold seven (14%) of the prestigious posts (e.g., CEO, CFO) in the executive suite as well as 42.9% (n=3) of the clout-based jobs in the business and financial industries. Females account for 27.3% of content creators in media, entertainment, and art/design, 38.5% of administrators in academia and represent the only "editor in chief" in journalism. Five females are at the top of the political sphere, with four holding high status U.S. government titles such as Representative, Senator, or Mayor.

(See special insert Table 8)

Second, healthcare in prime time is slightly more gender balanced than family films. In terms of head administrators or doctors (i.e., MD/PhD in mental or physical healthcare, dentists, veterinarians), females comprise of 29.6% of the workforce. Focusing solely on doctors, females encompass 33 of the 108 medical practitioners. Additionally, 45.7% of all nurses, social workers, and therapists are male. Given that nursing and social work may be thought of as traditionally gender-linked occupations, content creators should be applauded for showing a balance of males and females in these roles. At the lowest level of clout, however, a more conventional picture emerges with females portraying most of the caregivers, aides, and administrative support workers.

Third, and despite being absent from the apex of the legal arena, females make a strong showing as lawyers and judges in prime time. Roughly a third of attorneys (34.5%, n=19) and adjudicators (33.3%, n=6) are females. Fourth and finally, the largest arena for the world of prime-time work is media, entertainment, and art/design. A total of 664 of the 864 jobs in this sector are categorized as talent (e.g., actors, singers, dancers) and females fill 47% of those roles.

All in all, the occupation analysis reveals that prime time is filled with a myriad of aspirational role models for both boys and girls. Though not equal, females appear in a range of careers and

wield authority in many occupational sectors. We turn now to assess females' participation in another esteemed industry, STEM.

STEM. Only 71 characters are coded as having a STEM career in prime time, with 78.9% male and 21.1% female (see Table 9). Type of STEM job does not vary with gender, however.⁴⁰ A full 50.7% of all characters work in the life/physical sciences, with males populating this sector 2.6 times as frequently as females. Over half of STEM females work in the medical jurisprudence arena as forensic pathologists or medical examiners and all appear in dramatic programming. Crime dramas are also responsible for the five females working in computer science and/or technology. Outside of the dramatic series genre, only one comedy show and one news magazine depict females in STEM.

Table 9
STEM Fields by Gender in Prime Time

	Males	Females	Total
% w/STEM career	78.9% (n=56)	21.1% (n=15)	71
% in life/physical science	46.4% (n=26)	66.7% (n=10)	36
% in computer science	32.1% (n=18)	33.3% (n=5)	23
% in engineering	16.1% (n=9)	0	9
% of other STEM jobs	5.4% (n=3)	0	3

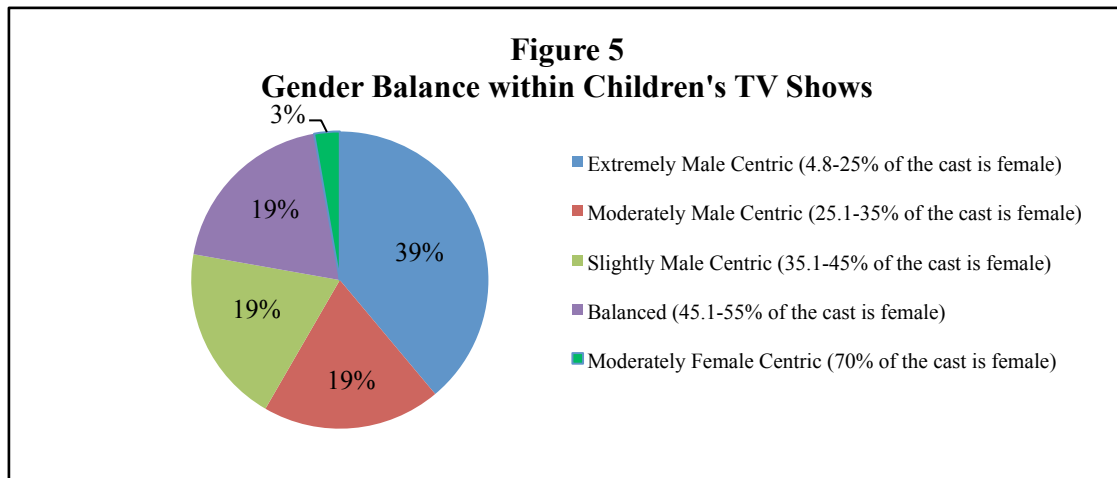
Note: Other is used when a character's occupation portrayal made it impossible to ascertain which of two STEM categories to use (i.e., physical science vs. engineering). At analysis, mathematics is collapsed into "other" given that only two male characters are shown working in this STEM field.

Looking across all of the measures in this study, prime time seems to paint a fairly balanced portrait of gender roles. The percentage of on screen girls and women is 38.9% and 22% of all shows feature gender-balanced casts. Focusing on portrayal, females and males are equally likely to be caregivers or romantic partners. Occupationally, females account for 34.4% of the work force and hold top leadership positions across seven out of eight industries. There is still room for improvement, however. A higher percentage of females than males are portrayed in a sexualized way and comedy series and children's shows depict females in less than a third of all speaking roles. The latter findings suggest that it is important to assess how females are fairing in kids' shows, which is the last section of this report.

Children's Shows

The sample of children's shows is drawn from the top 20 series for 2- to 5-year olds and the top 20 series for 6-to 11-year olds, for January 1st through December 31st 2011, as delineated by Nielsen Media Research.⁴¹ Similar to prime-time, several exclusions exist: films, sports, prime-time broadcast network shows, as well as double length episodes, episode specials, interstitial content, music videos, or any programming 5 minutes or less in duration. Finally, shows are included in the sampling pool if a minimum of 5 episodes of the series aired in 2011. The resulting list contains 20 popular series for 2- to 5-year olds and 20 popular series for 6- to 11-year olds, with 4 overlapping series. A single episode of each series is included after randomly selecting from all possible episodes aired during a specified period of time, using lists provided

by the networks. A total of 36 series are included in the final sample. See Appendix C for a complete list of children's programs evaluated. Like the earlier sections of the report, we now present results on the frequency of males and females, typecasting by gender, occupational portrayals, and STEM.

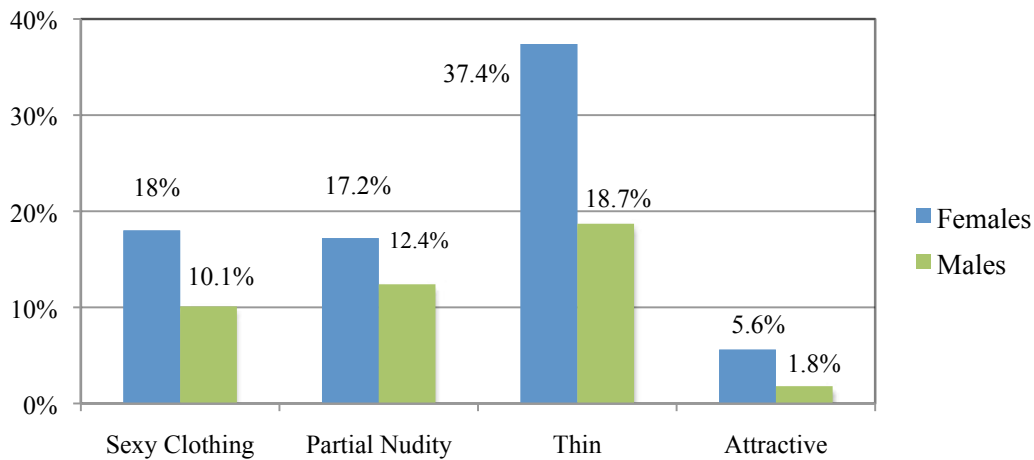


Prevalence. A total of 568 independent speaking characters with an identifiable gender appear on screen across the sample of children's shows. Just under a third (30.8%) are female and 69.2% are male. This translates into a ratio of 2.25 males to every 1 female. Gender does not differ by network.⁴² A difference exists by rating. Shows rated TV-Y (35.4%) and TV-G (34.9%) feature substantially more female characters on screen than those shows rated TV-Y7 (16.2%).⁴³

Just like family films and prime-time programs, we examine the percentage of children's shows with gender-balanced casts (see Figure 5). Only 19% of kids' programs depict a roughly equal percentage (45.1%-55%) of male and female speaking characters. One show portrays more on screen girls and women than boys and men. Nearly 40% of the programs are "extremely" male centric, featuring females in 25% or less of all speaking roles. Only 5 narrators appear across the children's sample and only one (20%) of them is female.

Stereotyping. For the demographic measures, ethnicity does not vary by gender. Nearly three fourths (74.9%) of all speaking characters in children's shows are Caucasian, 12.9% are Black, 4.7% are Hispanic, 6% are Asian and less than 2% are from "other" ethnicities. These overall findings somewhat parallel the results from prime time and family films, as well as some of our other research.⁴⁴ Again, females fare better on screen when they belong to certain racial/ethnic minority groups. Sixty percent of Hispanic and 52.6% of Asian characters are female. Other groups lag behind, with Caucasian (35.1%) and Black (31.7%) characters around one-third female.

Figure 6
Hypersexuality Measures by Character Gender in Children's Shows



In contrast to apparent ethnicity, age differs by character gender.⁴⁵ Females (34.9%, 28.4%) are more likely than males (24.9%, 15.6%) to be shown as children (0-12 year olds) and teens (13-20 year olds). Males (35.5%, 21%), on the other hand, are more likely than females (29%, 5.9%) to be portrayed as young adults and middle aged characters. No differences by gender emerge for characters 65 years of age or older.

Parental status is gendered in children's shows. Of the speaking characters portrayed with enough information for domesticity to be evaluated, females (60%) are more likely to be shown as caregivers than are males (29.3%).⁴⁶ Though trending in the same direction, the association between gender and relational status is not significant. Overall, 40.9% of speaking characters are shown in a committed romantic relationship.

Table 10
Hypersexuality Measures by Female Characters' Age in Children's Shows

	Teen 13-20 yrs	Young Adult 21-39 yrs	Middle Age 40-64 yrs
Sexy Clothing	35.1%	15.4%	0
Some Nudity	35.1%	10.3%	11.1%
Thin	50%	27%	0
Beautiful	6.3%	6.1%	0

Note: Only characters whose bodies approximate the human form are included in these analyses. The percentages reflect the proportion of all females within an age category shown with sexy clothes, exposed skin, thin, or beautiful. Due to low frequency of occurrence of some variables, the above findings should be interpreted with caution.

Two of the four measures tapping sexualization differ by gender (see Figure 6).⁴⁷ Females are more likely than males to be thin (37.4% vs. 18.7%) and draped in sexually revealing attire (18% vs. 10.1%). These findings suggest that child viewers are being exposed to sexy mediated role

models on TV at a very early age. Nudity and physical appearance are not meaningfully associated with gender.

Consistent with family films and prime time, females' age is associated with the likelihood of sexualization (see Table 10).⁴⁸ Female teens are more likely to be shown in sexy clothes (35.1%), partially naked (35.1%), and thin (50%) than are 21-39 year olds (15.4%, 10.3%, 27%, respectively) or 40-64 year olds (0, 11.1%, 0, respectively). The analysis for beauty by age is not statistically significant.

Table 11
Character Occupation by Gender in Children's Shows

	Males	Females	Total
Management	15.9% (n=22)	11.6% (n=5)	14.9% (n=27)
Professional	36.2% (n=50)	48.8% (n=21)	39.2% (n=71)
Service	15.2% (n=21)	9.3% (n=4)	13.8% (n=25)
Sales	7.2% (n=10)	16.3% (n=7)	9.4% (n=17)
Administration	5.1% (n=7)	7% (n=3)	5.5% (n=10)
Crime	9.4% (n=13)	0	7.2% (n=13)
Other	10.9% (n=15)	7% (n=3)	9.9% (n=18)
Total	100% (n=138)	100% (n=43)	100% (n=181)

Note: The job classification scheme is adapted and modified from the Bureau of Labor Statistics Occupational Outlook Handbook (2010-11). Our original 13 level scheme is collapsed into the seven categories above due to the infrequency of certain groups depicted (e.g., farming, maintenance/repair, construction, production, transportation). The columns feature the distribution of all working females and males by major group. The rows capture the frequency of male and female employees within a particular industry.

Occupation & STEM. A total of 190 characters have jobs in children's shows, with 40.7% of females and 47.7% of males shown with an occupation. The presence or absence of a job and gender is not statistically related. In terms of the total workforce, only a quarter (25.3%) of employees are female.

Major occupational group does not differ by gender (see Table 11). Females appear most frequently in professional/specialized (48.8%) careers followed by occupations in sales (16.3%) and management (11.6%). Of the workforce, however, females comprise 29.6% of jobs in professional occupations, 41.2% of jobs in sales, and 30% of jobs in administration. Females hold only 18.5% of management careers. For males, the highest percentage of jobs occurs in professional contexts (36.2%) followed by management (15.9%) and service careers (15.2%). Males are over 4 times as likely as females to be depicted in a management/business/financial occupation and not one female is portrayed supporting her life by crime.

(See special insert Table 12)

Our sector analysis of work in children's shows reveals a few interesting patterns. Similar to family films and prime time, the single largest industry in children's shows is media,

entertainment, and arts/design. A full 50% of all occupations from the sector analysis are from this industry. Twenty seven jobs depict talent, including but not limited to actors, musicians, and stunt crew. Females comprise 37% ($n=10$) of these performers. Second, and somewhat analogous to family films, few females are portrayed as top executives (2 VP's of companies) and women are missing altogether from esteemed positions in business/finance and politics/government. Only one male appears at the top of each of these sectors. Of the 10 characters in healthcare, only 3 are doctors (2 males, 1 female) and both nurses are female.

Eight characters work in a STEM field (4.2% of total labor pool) and only one is female (12.5%). Given that there are multiple segments of some shows in the sample, 2 of the male STEM workers are coded twice (once across each short segment). Thus, only 6 unique characters with STEM jobs appear across the sample of 36 children's shows. Five out of six males are depicted in the life/physical sciences (i.e., paleontologists, medical/animal scientists) and one male is an engineer. The sole female coded is an astronaut.

Summing up, girls and women comprise less than a third of all speaking characters in children's shows. Less pronounced gender differences emerge on the appearance and domesticity measures. In terms of jobs, a substantial percentage of female characters are depicted with an occupation but they represent only a quarter of the workforce. Few female characters are found in clout positions and the sector shown most frequently in children's shows is media, entertainment, and arts/design.

Conclusion

The purpose of this investigation is to examine gender roles and the world of work in media popular with youth. We examine 129 family films, 275 prime-time shows, and 36 episodes from children's series, evaluating a total of 11,927 characters with an identifiable gender. Across media, some common trends and notable deviations appear. Here, we will briefly summarize the results in three ways to capture what boys and girls may be learning about gender and career aspirations from popular mass media messages.

First, the portrayal of occupation is largely gendered. Both family films and prime-time shows depict female characters as working less than their male counterparts. Of the total workforce shown, females comprise between a fifth (20.3% in family films) and a third (34.4% in prime time) of those employed. In the real world, females 16 years of age or older make up 47% of the U.S. labor market.⁴⁹ Prime time is more likely than family films or children's shows to depict powerful female leaders working *across* a variety of industry sectors. Across seven out of eight industries, prime-time females embody leadership positions. Prime-time females are portrayed as 14% of corporate executives, 42.9% of investors/economic officials, 27.8% of high level politicians, 29.6% of doctors/hospital managers/CMO's, 38.5% of academic administrators, the only "editor in chief" in journalism, and 27.3% of media content creators. However, prime-time females are still not on par with prime-time males in the number of clout positions held across industries.

Family films are the top performers when it comes to STEM, portraying 26 women in vocations involving science, technology, engineering and math. Although a step in the right direction, not one female lead or co lead across 129 films has a STEM career, whereas 14 male leads or co leads do. Further, STEM males outnumber STEM females by a ratio of over 5 to 1 in family

films and 3.73 to 1 in prime time. Eight STEM characters are shown within our sample of children's shows. Only one is female (12.5%).

Second, a few common gender stereotypes still pervade film and television programming. Females are more likely than males to be young, thin, and sexualized, which are patterns that hold across all three media. These depictions may be problematic, as some research shows that females' body image concerns can be affected by media exposure. Seeing a steady diet of thin or sexualized images in the media may evoke body shame, self objectification, or appearance anxiety as well as diminished body satisfaction among some female viewers.⁵⁰ For males, repeated exposure to idealized females may create unrealistic expectations about appearance standards regarding the opposite sex.

Third, gender imbalance is a cross media problem. Female characters are less likely to appear on screen than male characters across family films, prime-time programs, and kids' shows. Of the three platforms, however, prime time presents the most gender equitable programming. From a low of 11% in movies to a high of 22% in prime time, few stories deliver gender-balanced casts. Some differences by rating or genre emerge within medium, however. Importantly, reality shows and news magazines feature near parity in prime time. These findings suggest that gender balance is possible in popular media content. Depicting gender-balanced casts does not diminish success of TV shows. Gender balanced stories may be just as profitable as gender imbalanced stories.

Failing to represent females on screen may affect viewers in at least two different ways. For one thing, young children grow up consuming biased media messages. With time and repeated exposure, some children may come to normalize inequality in storytelling. This normalization process may "spill over" to other arenas, where girls/young women and boys/young men fail to question or even perceive gender bias in a variety of academic, athletic, social, or even occupational contexts. For another thing, the lack of gender balance on screen -- if noticed -- may communicate to girls that they are of less value than boys. Extracting this message, rather than creating oppositional texts while viewing, may negatively affect the self worth or self esteem of some female viewers.

There are at least a few limitations to note regarding this study. The first pertains to the sample of media content. Because we used purposive sampling, our findings are not generalizable to the larger population of top-grossing films, prime-time programs, or children's shows. Rather, the results describe only the media content analyzed. Further, a small number of children's shows are sampled in comparison to the number of prime-time programs or top-grossing films. It may very well be the case that a larger sample of kids' content would yield a different set of results, particularly for the occupation and industry sector coding. As such, future researchers may want to routinely monitor gender roles in programming targeted to children. Finally, our STEM measures were conservatively crafted. We did not measure STEM behavior, only the presence/absence of characters working in STEM fields. A great number of STEM actions appear in the samples (sometimes involving children) that are not captured in this study, given that the focus is on measuring jobs and not all behavior.

Even with these limitations, our findings are informative and compelling. The results show that young females need more aspirational role models inhabiting a greater range of leadership positions across a variety of occupational sectors and media platforms. By increasing the

number and diversity of female leaders and role models on screen, content creators may affect the ambitions and career aspirations of girls and young women domestically and internationally. As Geena Davis states, "If she can see it, she can be it."

Notes

¹ Smith, S.L., & Choueiti, M. (2011). *Gender disparity on screen and behind the camera in family films: The executive report*. Los Angeles, CA: Geena Davis Institute for Gender and Media. See also: Smith, S.L., & Cook, C.A. (2008). *Gender stereotypes: An analysis of popular films and TV*. Los Angeles, CA: Geena Davis Institute for Gender and Media. Smith, S.L., Pieper, K.M., Granados, A., & Choueiti, M. (2010). Assessing gender-related portrayals in top-grossing G-rated films. *Sex Roles*, 62, 774-786.

² Smith, S.L., Choueiti, M., & Stern, J. (2011). *Occupational aspirations: What are G-rated films teaching children about the world of work?* Los Angeles, CA: Geena Davis Institute for Gender and Media.

³ Herrett-Skjellum, J., & Allen, M. (1996). Television programming and sex stereotyping: A meta-analysis. *Communication Yearbook*, 19, pp. 157-185. Finding reported above based on non experimental correlation (see page 174). Grabe, S., Ward, L.M., & Hyde, J.S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin*, 134(3), 460-476. Aubrey, J.S. (2006). Effects of sexually objectifying media on self-objectification and body surveillance in undergraduates: Results of a 2-year panel study. *Journal of Communication*, 56, 366-386.

⁴ Our approach to coding involved a three-step process. First, three coders were randomly assigned to independently view a movie or TV show in our lab at ASC&J. Coders use cast lists from IMDB as well as closing credits to aid unitizing decisions. After independent content evaluation, reliability was calculated per film/TV show and a discussion ensued regarding coding disagreements. In most cases, the three coders were present for group deliberations. Because of conflicting schedules and/or the summer break, some coders were not available to discuss their judgments. When this occurred, the project administration met with available members of the group to resolve all disagreements. A final agreement file was created post discussion.

Second, a member of the research team evaluated the final agreement file by conducting a "quality check." The coded content (i.e., movie, prime time show, children's program) was watched in its entirety and the final agreement file was scanned for inconsistencies. When this occurred, the quality check coder noted any previous coding decision s/he did not agree with. The quality checker also captured screen shots of two appearance indicators. Third, all disagreements were discussed with the project administrator and files were altered when obvious unitizing or variable coding errors/oversights were made. By employing this three-step approach to coding content, we maximize obtaining both scientifically reliable and accurate data.

⁵ The list for 2006 to 2011 films was obtained from boxofficemojo.com.

⁶ General audience films in the following categories were excluded from the sample: 1) re-releases (e.g., *Polar Express*, *Toy Story*, *Toy Story 2*); 2) foreign language films (e.g., *The Cave of the Yellow Dog*); 3) documentaries (e.g., *Jonas Brothers: The 3D Concert Experience*); and kidtoon content (i.e., monthly matinee movies for 3- to 9-year olds exhibited in select U.S. theatres).

⁷ To illustrate, only one *Transformers*, *Twilight*, or *Harry Potter* film was assessed in this study.

⁸. In addition to independent or single speaking characters, some groups were assessed. A group was coded when two or more characters shared the exact same physical appearance but spoke independently of one another making their independent identities impossible to ascertain (e.g., Stormtroopers in *Star Wars*). When this occurred, the identical characters were loaded onto one line of data and treated as a single character. There were only 25 groups coded across the 129 films. Of those with an identifiable gender ($n=23$), 87% were male ($n=20$) and 13% were female ($n=3$). Two of the groups were coded as "can't tell" for sex. Groups were not included in any of the film, prime time, or children's analyses.

⁹. Smith, S.L., & Cook, C.A. (2008). Smith, S.L., & Choueiti, M. (2011).

¹⁰. A chi-square was calculated for *movie rating* (G, PG, PG-13) by *gender*, $X^2(5,839, df=2) = 10.84, p < .01, V^* = .043$.

¹¹. Motion Picture Association of America (n.d.). *Theatrical market statistics 2011*. Los Angeles, CA: Author. See also, Motion Picture Association of America (n.d.). *theatrical market statistics 2010*. Los Angeles, CA: Author.

¹². In terms of demographics, the *age* (0-5 years, 6-12 years, 13-20 years, 21-39 years, 40-64 years, 65 years or older), *biological sex* (male, female), and *apparent ethnicity* (Caucasian, Hispanic, Black/African American, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Asian, Middle Eastern, or other/mixed) of every speaking character was examined. In terms of domesticity, the *parental status* (not a parent, single parent, co-parent, parent-relational status unknown) and *relational status* (single, married, committed but not married, committed and marital status unknown) of every speaking character also was assessed. All demographic, domesticity, and appearance variables also featured "can't tell" (i.e., not enough information available to make a judgment) and "not applicable" (i.e., variable does not apply in certain cases) as response options.

Four appearance variables were measured. Adapted from Downs and Smith (2010), *sexually revealing clothing* (SRC) refers to apparel that draws attention to the curves or angles between the mid chest and upper thigh regions of the body. SRC was coded as present or absent. *Nudity* refers to exposing skin between the mid chest and upper thigh regions. There were three levels for nudity: none, some (i.e., exposing skin in cleavage, midriff, or upper thigh/lower buttocks area), or full (i.e., entire body is exposed from the front and/or back with no covering. For females=topless or lower exposure of genital area; For males=lower exposure of genital area only). Given that there were so few instances of full nudity in this investigation, the variable was collapsed into two levels: no exposed skin vs. some exposed skin (partial + full).

Characters also were evaluated for *thinness*, which was based on the amount of body fat and/or muscle shown. Aided by 7-point line drawings depicting boys/men and girls/women from extremely underweight to obese (modified version of Collins' 1991 scale), each character was coded as not thin, thin, or extremely thin. This variable was dichotomized at analysis: not thin vs. thin. Thinness, nudity, and sexually revealing clothing were only evaluated for characters with human or human-like bodies.

Physical beauty, however, was assessed for every speaking character. Physical beauty was present when a character verbally (e.g., "you are so handsome," "she is beautiful") or nonverbally (e.g., whistling, cat call) indicates the desirousness of another character. There were three levels for this variable: no references to physical beauty, one reference, or two or more references. Again, we collapsed this variable at analysis into two levels: attractive (one or more references) vs. not attractive.

There were four occupation measures. We first assessed whether each character possessed a *job* (no, yes), independent of whether the occupation could exist in the real world or was a legal means of earning money. Unpaid help (e.g., interning) did not count as employment nor did favors or other voluntary

altruistic acts. Employment was ascertained by assessing verbal/textual cues, uniform/clothing worn and/or displayed, artifact use, engagement in work role-related behaviors, and/or the context surrounding a character's life. In most, but not all cases, children (for exception, see *Santa Clause 3*), animals, and super natural creatures (for exception, see *Terminator Salvation*) were not applicable on this measure.

Using a modified version of the scheme in the Bureau of Labor Statistics (BLS) Occupational Outlook Handbook (2010-11), we originally categorized each job into one of 13 mutually exclusive *major groups*: (1) management/ business/financial; (2) professional or specialized; (3) service; (4) sales; (5) administrative/office support ; (6) farming/fishing/forestry; (7) construction; (8) installation/maintenance/repair; (9) production; (10) transportation and material moving; (11) armed forces; (12) crime; or (13) other. The last three categories we added to the BLS scheme. Due to the infrequency of some careers, this variable was collapsed at analysis into 8 groupings: management, professional, service, sales, administrative support, military, crime, and other.

The last set of quantitative measures pertain to STEM. Because a formal conceptualization of STEM is lacking, we used the definition and classification scheme offered by the U.S. Department of Commerce Economics and Statistics Administration (see *Women in STEM: A Gender Gap to Innovation*). The ESA Issue Brief (August, 2011) #04-11 states, "the Economics and Statistics Administration (ESA) defines STEM jobs to include professional and technical support occupations in the fields of computer science and mathematics, engineering, and life and physical sciences" (p. 2). The ESA provides a record of 50 jobs within these areas (see Appendix Table 1, p. 9). The brief makes clear that social scientists and educators are not a part of the STEM workforce definition. See <http://www.esa.doc.gov/sites/default/files/reports/documents/womeninstemagaptoinnovation8311.pdf>

We used the U.S. Department of Commerce classification scheme but added two specific types of STEM jobs. First, our definition includes university professors and college instructors that teach or conduct research within one or more of the STEM fields listed by the ESA. Characters working in the area of medical jurisprudence (i.e., medical examiners, forensic pathologists) also were categorized as STEM. This decision was based on the fact that these careers rely heavily on the medical sciences and the hypothetico-deductive method. If a character was coded as working in a STEM field, s/he was then categorized by area: 1) life or physical science, 2) technology, 3) engineering, 4) mathematics or 5) other (i.e., a character's occupational portrayal made it impossible to ascertain which of two STEM categories to use such as physical science or engineering). Because of the infrequency of on screen mathematicians, we collapsed this level into the "other" category.

In terms of training and reliability, undergraduate research assistants (RAs, $n=30$) were recruited in the Fall and Spring terms at the Annenberg School for Communication & Journalism at USC. The RAs were trained in a classroom type setting for 5-6 weeks, learning the conceptual and operational definitions in the codebook and conducting practice tests. Four reliability diagnostics (*Sleepless in Seattle*, *Hitch*, *Cruel Intentions*, *The Devil Wears Prada*) were conducted to assess the RAs unitizing and variable coding decisions prior to evaluating the sample. For unitizing, the following percentages represent characters identified by 80% or more of the coders (80.77%, 68.57%, 68.75%, 51.79%). Using the Potter and Levine-Donnerstein (1999) reliability formula for multiple coders, a total of 54 median coefficients were calculated across 17 measures and four films. For training purposes, not every measure was assessed on the first two diagnostics. Across 17 variables, the coefficients were all above .70 save one: thinness (.69 on *Hitch*). These numbers suggest that the coders were quite consistent on training unitizing and variable coding.

After training, three coders were randomly assigned to independently evaluate each of the movies in the sample. In some instances, the films ($n=110$) had been previously unitized and evaluated for one of our other longitudinal investigations. Here, the coders only assessed new occupation-related variables (occupation, major group) and a few other measures (e.g., *parental status*, *romantic relationship*,

thinness) that were re-conceptualized for this study. In other instances, the films ($n=19$) had to be completely unitized and coded.

For unitizing, we calculated the percentage of characters coded by all but one RA. Save three films (*Thor*=67.44%, *Hop*=69.23%, *Cars 2*=76.72%), all the percentages were above 80% (range=80.49%-100%). Median coefficients for the variables coded are as follows: *form*=1.0 (range=1.0); *type*=1.0 (range=.64-1.0), *age*=1.0 (range=.65-1.0), *sex*=1.0 (range=1.0), *ethnicity*=1.0 (range=.66-1.0), *parental status*=1.0 (range=.64-1.0), *relational status*=1.0 (range=.64-1.0), *sexually revealing clothing*=1.0 (range=.61-1.0), *nudity*=1.0 (range=.63-1.0), *thinness*=1.0 (range=.63-1.0), *physical beauty*=1.0 (range=1.0), *occupation*=1.0 (range=.57-1.0), *major group*=1.0 (range=.66-1.0), *first narrator*=1.0 (range=.47-1.0), *first narrator sex*=1.0 (range=.61-1.0), *second narrator*=1.0 (range=1.0), and *second narrator sex*=1.0 (range=.61-1.0).

A second team of coders ($n=12$) were trained in the Spring of 2012 to evaluate characters' *role* (primary, secondary, tertiary) and a series of STEM variables (*STEM job*; *STEM major group*). Initially, the authors of the study constructed measures and pre tested them on a series of films both within and outside the sample parameters. After being trained, at least two individuals coded every film in the sample for these variables. For 13 films, three or more coders evaluated the same content. Median reliability coefficients for *role* (.87, range=.585-1.0), *STEM job* (.95, range=.15-1.0), and *STEM major group* (1.0, range=.68-1.0) were computed using Scott's Pi with two coders and the Potter & Levine-Donnerstein (1999) formula with 3 or more coders. Similar to all other coding, the STEM RA's discussed all disagreements and arbitration was managed by the project administrator. All four study authors functioned as STEM coders on the film portion of this investigation.

Two final caveats pertaining to the coding and analysis process must be noted. First, the variables reported in this investigation are a subset of the measures applied to family films, prime-time programs, and children's shows. Second, every character was evaluated with a series of measures capturing demographics, sexualization, and occupation. In most instances, a character was only coded once in this study. Just as in all our other investigations, we stipulated that characters undergoing a true demographic change (i.e., change in type, age, sex or ethnicity) would constitute a "new line" of data. Thus, characters that morph from male to female (Genie in *Aladdin*) would constitute two lines of data whereas a character cross dressing (Robin Williams in *Mrs. Doubtfire*) would constitute only one. There were a total of 259 demographic changes in the sample (4.3% of 5,990 coded characters). In addition, we stipulated that a new character line would be created for characters that have more than one job. Only 123 characters (2.1% of 5,990 characters) held more than one job. Thus, an additional 382 lines of data emerged due to demographic or job changes. For analysis purposes, demographic changes always have been included in our prevalence calculations. Thus, the exact same procedure was followed in this study as we have employed in previous research.

To ensure that the inclusion of occupation changes would not impact the study's findings, the demographic (age, ethnicity), domestic (parental status, relational status), and appearance (SRC, nudity, thinness, beauty) analyses were run and compared with and without these 123 characters. The same statistical conclusions were reached across all analyses on family films, prime-time programs (82 occupation changes) and children's shows (4 occupation changes), with only minor deviation (less than 5%) to percentages, save one. The prime time analysis of *sexually revealing clothing* (no, yes) by *females' age* (teen, young adult, middle age) revealed a 5% difference between two groups (teens vs. middle age) that previously did not exist. Given that there is very little difference between the two sets of analyses, we included occupation changes in all domestic, appearance, and job-related analyses. As a result, 123 characters will be counted more than once.

¹³. Prior to running the analysis, the age variable was collapsed into 5 levels (child, teen, young adult, middle age, elderly). Chi square analysis revealed a significant association between *gender* by *apparent age*, $X^2(5,666, df=4) = 140.82, p < .01, V^* = .16$.

¹⁴. For parental status, we collapsed the variable into two levels: parent vs. not a parent. The chi-square analysis revealed a significant association for *parental status* and *gender*, $X^2(1,055, df=1) = 14.40, p < .01, \phi = .12$. We similarly collapsed romantic relationship status (present vs. absent). A similar significant effect was observed for character *gender* and *romantic relationship*, $X^2(1,006, df=1) = 13.44, p < .01, \phi = .12$. Two additional points about coding these variables are warranted. First, parental and relational status was evaluated only when characters were featured with enough information to make such judgments. Otherwise, the character's relational/parental status was coded as "can't tell." Children under 12 were "not applicable" on these measures. Second, characters parental/relational status can change over the course of an unfolding narrative. As a result, coders were instructed to evaluate characters' parental/relational status that was held for the longest duration across the plot.

¹⁵. Each of the hypersexuality measures differed by gender: *sexually revealing clothing*, $X^2(5,017, df=1) = 354.62, p < .01, \phi = .27$; *nudity*, $X^2(5,020, df=1) = 285.21, p < .01, \phi = .24$; *thinness*, $X^2(4,169, df=1) = 326.41, p < .01, \phi = .28$; and *physical beauty*, $X^2(5,962, df=1) = 202.15, p < .01, \phi = .18$.

¹⁶. Grabe, S., et al. (2008). See also, Ditmar, H., Halliwell, E., & Ive, S. (2006). Does Barbie make girls want to be thin? The effect of experimental exposure to images of dolls on the body image of 5- to 8-year old girls. *Developmental Psychology*, 42, 283-292.

¹⁷. Aubrey, J.S. (2006). See also, Roberts, T.A., & Gettman, J. Y. (2004). Mere exposure: Gender differences in the negative effects of priming a state of self-objectification. *Sex Roles*, 51(1/2), 17-27. Harper, B., & Tiggemann, M. (2008). The effect of thin ideal media images on women's self-objectification, mood, and body image. *Sex Roles*, 58(9/10), 649-657.

¹⁸. American Psychological Association. (2010). Report of the APA task force on the sexualization of girls. Washington DC: Author. Retrieved online, <http://www.apa.org/pi/women/programs/girls/report-full.pdf>

¹⁹. Examining females within three age groups (13-20, 21-39, 40-64) only, significant associations emerged for *sexually revealing clothing*, $X^2(1,213, df=2) = 23.30, p < .01, V^* = .14$; *nudity*, $X^2(1,211, df=2) = 16.31, p < .01, V^* = .12$; *thinness*, $X^2(965, df=2) = 57.06, p < .01, V^* = .24$; and *physical beauty*, $X^2(1,339, df=2) = 24.23, p < .01, V^* = .13$.

Children and elderly were excluded from this analysis. Among females aged 0 to 12, only 4.1% ($n=6$) were shown in revealing attire and 4.8% ($n=7$) were depicted with some exposed skin. Over a third were thin (37.2%, $n=45$) and 9.9% ($n=18$) were referenced as beautiful. Given the low frequency of occurrence of SRC and nudity and because these two variables could be present simply by depicting a child in a bathing suit or wearing diapers, we excluded 0-12 year olds from analysis. In terms of the elderly, a similar pattern emerged across sexy clothing (8.4%, $n=8$), some exposed skin (6.3%, $n=6$), thinness (9.1%, $n=8$), and physical beauty (0%, $n=0$). Again, due to the low frequency of occurrence across all four measures, elderly females were not included in the analysis.

²⁰. A chi-square for *occupation* (no, yes) by *gender* was significant, $X^2(5,390, df=1) = 202.53, p < .01, \phi = .19$.

²¹. U.S. Bureau of Labor Statistics (May, 1, 2012). *Women as a percent of total employed in selected occupations, 2011*. Retrieved online, http://data.bls.gov/cgi-bin/print/pi/opus/ted/2012/ted_20120501.htm

²² Major group varied by gender, $X^2(3,206, df=7) = 250.78, p < .01, V^* = .28$.

²³ These decisions were made post hoc, using the coders' descriptions of occupations found in family films. Only a sub section of characters in the first five major occupational groups above (i.e., management through administration) were assessed, as they represent the hierarchical nature of many -- but not all -- occupations across multiple industries. In terms of the coding process, jobs were first scrutinized for sector classification using an iterative approach by one of the study's authors (Choueiti) in consultation with the first author. After the sectors were concretized, clout was determined per character within each field. Portions of films were re-watched when judgments were ambiguous. Multiple passes thru the data were conducted, ensuring a fit between character job and sector/clout coding and cross media classifications. Given the tapered and subjective nature of this analysis, the results are suggestive and should be interpreted with caution.

²⁴ The White House Project (2010). *The White House Project: Benchmarking Women's Leadership*. Retrieved online, <http://benchmarks.thewhitehouseproject.org/>

²⁵ We also examined characters working in a variety of other sectors that are not reported here: 1) science, engineering & technology (SET); 2) religion; 3) sports; 4) personal care/recreation; 5) food service; 6) law enforcement; and 7) military. The SET characters were not included in the sector analysis as we conducted a separate STEM assessment that spanned across all characters and industries. If characters were coded into one of the seven sectors in this footnote, they were not eligible for the analysis reported above in all cases except one. Individuals working as doctors or medics within the military sector ($n=12$) were pulled out and added to the healthcare industry.

²⁶ See Bureau of Labor Statistics (January, 2011). *Household data annual averages*. <http://www.bls.gov/cps/cpsa2010.pdf> We used the following report to inform our definition of top executive: Bureau of Labor Statistics, *U.S. Department of Labor. Occupational Outlook Handbook, 2012-13 Edition*. Top Executives. <http://www.bls.gov/ooh/management/top-executives.htm> Using this framework, the top executive category involves chief officers (i.e., CEO, CFO, COO) as well as characters holding titles of President, Vice President, or General Manager of large nongovernmental or non academic organizations. The last two groups were excluded due to the fact that we examined top leadership positions within each of these sectors.

²⁷ U.S. Department of Commerce Economics and Statistics Administration (August, 2011).

²⁸ The chi-square for *stem category* (life/physical science, computer science, engineering, other) by *gender* was significant, $X^2(160, df=3) = 7.96, p < .05, \phi = .22$.

²⁹ U.S. Department of Commerce Economics and Statistics Administration (August, 2011).

³⁰ A purposive sample was selected to maximize obtaining roughly a week of representative prime-time content. Prime time was defined as 8:00 p.m. to 11:00 p.m. Monday through Saturday and 7:00 p.m. to 11:00 p.m. on Sunday. Given that the broadcast and cable channels in the sample did not schedule TV shows in the same consistent fashion, two approaches to sampling had to be employed. Across seven channels (ABC, NBC, CBS, Fox, CW, Cartoon, and Nickelodeon), we randomly selected one episode from each series broadcast consistently across time slot and channel (i.e., airing at least two of the three weeks between February 6th and 26th). When shows aired inconsistently, a fourth week (February 27th-March 4th) was considered or the slot was left empty.

For three cable channels (Disney, E!, MTV), a show was randomly selected from series that aired repeatedly on the same day but not always at the same time each week. When a series was broadcast more than once (up to five times) across one week night, one episode was selected. When a series aired

six to eight episodes on an evening across multiple weeks, two episodes were selected. When nine episodes aired on the same night, three episodes were selected.

As displayed in Appendix B, the breakdown of shows in the sample per channel is as follows: ABC ($n=22$), NBC ($n=22$), CBS ($n=25$), FOX ($n=19$), CW ($n=16$), Cartoon Network ($n=43$), Disney ($n=34$), E! ($n=28$), Nick ($n=44$), and MTV ($n=22$). Due to our USC cable provider, two channels were recorded using an East Coast cable feed: MTV and E!

A total of three episodes appear twice in the sample, all of which aired on E! Six additional shows which aired but were not selected were also included to replace repeated episodes on Disney ($n=3$) and MTV ($n=3$). Due to a recording error on MTV that affected the chosen episode, a later broadcast of the same program was substituted during coding.

³¹. In the Spring of 2012, we recruited 34 RAs to assess the prime time and children's purposive samples. These RAs were trained on the coding scheme in the same way as the Fall 2011 RAs and by the same instructor (Choueiti). The only difference between these two groups pertained to the fact that the Spring RAs assessed STEM, in addition to all other study measures. The coders completed the same four reliability diagnostics as the Fall group before they began evaluating television content. In terms of unitizing, the following percentages represent characters identified by 80% or more of the coders (67.80%, 60.00%, 64.71%, 52.73%). Using the Potter and Levine-Donnerstein (1999) formula for multiple coders, 56 median reliability coefficients were calculated across 19 measures and four films. Across 19 measures, only three of the 56 coefficients were below .70 (*Hitch*, thinness=.67; *Cruel Intentions*, thinness=.67, STEM Job=.67).

Once coding commenced, three RAs were individually assigned to evaluate each program. Unitizing agreement (% of characters coder per show by all but one RA) was excellent. All but eleven shows (4%) had unitizing agreement between 70.59% and 100%. Of the eleven shows with unitizing agreement below 70%, nine programs were between 60.98%-67.50% and the remaining two were 47.37% and 48.00%. Median coefficients for the variables are as follows: *form*=1.0 (*range*=1.0); *type*=1.0 (*range*=.64-1.0), *age*=1.0 (*range*=.65-1.0), *sex*=1.0 (*range*=.61-1.0), *ethnicity*=1.0 (*range*=.66-1.0), *parental status*=1.0 (*range*=.64-1.0), *relational status*=1.0 (*range*=.64-1.0), *sexually revealing clothing*=1.0 (*range*=.61-1.0), *nudity*=1.0 (*range*=.63-1.0), *thinness*=1.0 (*range*=.63-1.0), *physical beauty*=1.0 (*range*=.63-1.0), *occupation*=1.0 (*range*=.57-1.0), *major group*=.83 (*range*=.00-1.0), *STEM job*=1.0 (*range*=.00-1.0), *STEM group*=1.0 (*range*=.00-1.0), *first narrator*=1.0 (*range*=.47-1.0), *first narrator sex*=1.0 (*range*=.61-1.0), *second narrator*=1.0 (*range*=.47-1.0), and *second narrator sex*=1.0 (*range*=.61-1.0).

For all analyses, we approached the data in the exact same way family films were assessed. Only single or independently speaking characters were evaluated. Only one group was coded across the 275 prime-time programs. A total of 168 demographic ($n=86$) and occupation changes ($n=82$) occurred in prime time. See footnote 12 for how we dealt with these changes in the analysis.

³². A chi-square revealed a significant association between *genre* (news magazine, drama, comedy, reality shows, children's series) and character *gender*, $X^2(5,520, df=4) = 134.90, p < .01, V^*=.16$.

³³. Narrator was measured for each show or story segment. Some shows feature more than one unfolding narrative or segment within an episode (e.g., *Spongebob Squarepants*). When this occurred, the narrator variables were assessed for every segment airing within a program. This same approach to coding narrators was applied to the children's TV sample as well. A total of 287 stories (segments plus full time block narratives) populated the prime-time sample.

³⁴. The analysis revealed a significant association between character *age* by *gender*, $X^2(5,431, df=4) = 103.19, p < .01, V^* = .14$.

³⁵. The chi-square for *apparent ethnicity* by *gender* was significant, $X^2(5,161, df=4) = 10.11, p < .05, V^* = .04$. However, a 5% gender difference was not detected within ethnic grouping.

³⁶. Chi-square analyses revealed that *character gender* varied by the *four appearance measures*: *SRC* $X^2(5,258, df=1) = 621.21, p < .01, \phi = .34$; *nudity* $X^2(5,263, df=1) = 431.20, p < .01, \phi = .29$; *thinness* $X^2(4,545, df=1) = 350.93, p < .01, \phi = .28$; *physical beauty*, $X^2(5,602, df=1) = 140.14, p < .01, \phi = .16$.

³⁷. Chi-square analyses revealed that *females characters' age* (teen, young adult, middle aged) varied by the *four appearance measures*: *SRC* $X^2(1,984, df=2) = 59.13, p < .01, V^* = .17$; *nudity* $X^2(1,985, df=2) = 60.96, p < .01, V^* = .17$; *thinness* $X^2(1,706, df=2) = 100.25, p < .01, V^* = .24$; *physical beauty*, $X^2(2,017, df=2) = 21.59, p < .01, V^* = .10$.

Similar to family films, children (0-12 years old) and elderly (65 years and older) were excluded from this analysis. Again, the low frequency of occurrence of SRC and nudity and because these two variables could be present simply by depicting a child in a bathing suit or wearing diapers, we excluded 0-12 year olds from analysis. The percentage of 0-12 year old females by the appearance variables is as follows: sexy attire (1.1%, $n=1$), some exposed skin (8.9%, $n=8$), thinness (43.6%, $n=34$), attractiveness (8.9%, $n=8$). In terms of the elderly, a similar pattern of low frequency emerged across some of the variables: sexy clothing (4.7%, $n=2$), some exposed skin (4.7%, $n=2$), thinness (8.8%, $n=3$), and physical beauty (6.8%, $n=3$).

³⁸. The chi-square for *occupation* (no, yes) by *gender* was significant, $X^2(5,297, df=1) = 52.31, p < .01, \phi = .10$.

³⁹. The analysis revealed a significant association between *major occupational group* by *gender*, $X^2(2,582, df=7) = 143.88, p < .01, V^* = .24$.

⁴⁰. Chi square analysis for STEM classification and gender was not significant, $X^2(71, df=3) = 4.17, p = .24, V^* = .24$.

⁴¹. A list featured 250 shows by rank, rating, and share. The file was sorted by rating within 2 to 5 year olds and then again for 6 to 11 year olds. After removing exclusions, we selected popular series by ranking them within the two age groups listed above. We then contacted three networks (PBS, Disney, Nickelodeon) to solicit a list of all the episodes that aired between June 1st and December 31st 2011 within each children's series. In cases where a show did not air more than 5 episodes during this time frame, we asked for a list of the episodes that aired between January 1st and May 31st 2011. From the list of episodes, we removed double-length shows or specials and then randomly selected one program to be content analyzed for gender roles.

Some shows were split into two 12- to 15-minute-long segments, rather than one continuous story filling a single time slot (i.e. *Spongebob Squarepants*). For most shows of this nature, when an episode was broadcast, the segments were paired consistently. In these cases (i.e., *Kick Butowski*, *Thomas & Friends*) an episode was selected at random from the list of half hour programs. There were two special cases, however.

First, certain programs (i.e., *Fanboy & Chum-Chum*, *Planet Sheen*) occasionally aired a single 12-minute episode, equivalent to one broadcast segment. When these unique segments aired, they were considered the same as half-hour episodes with regard to sampling probability. However, if a 12-minute segment

was selected, that segment plus the corresponding segment (obtained from production codes) were both included, even if the corresponding segment did not air. Three segments from *Spongebob Squarepants* were excluded: two that were never broadcast together, and one whose length could not be verified.

The second exception was *Fish Hooks*. This series did not consistently pair segments for network broadcast. However, when episodes were made available for purchase on iTunes or Amazon, two segments were combined to create a half-hour program. Thus, each individual segment was eligible to be included in the sample. When a segment was chosen it was included in the sample, along with the segment bundled with it for online purchase. As a result, all episodes of children's programs in the sample were at least 25 minutes to a half-hour in duration. To obtain programs, iTunes, hulu.com, and Amazon prime were utilized. When shows were not available via these platforms, the network supplied them. See Appendix C for a complete list of the sample of children's shows.

For the sample of children's shows, unitizing agreement (% of characters per show coded by all but one evaluator) was excellent. All but one show (87.5%) had unitizing agreement between 90.91% and 100%. Median coefficients for each variable are as follows: *form*=1.0 (*range*=1.0); *type*=1.0 (*range*=.64-1.0), *age*=.74 (*range*=.65-1.0), *sex*=1.0 (*range*=1.0), *ethnicity*=1.0 (*range*=1.0), *parental status*=1.0 (*range*=.64-1.0), *relational status*=1.0 (*range*=.64-1.0), *sexually revealing clothing*=1.0 (*range*=.61-1.0), *nudity*=1.0 (*range*=.63-1.0), *thinness*=1.0 (*range*=.63-1.0), *physical beauty*=1.0 (*range*=1.0), *occupation*=1.0 (*range*=.57-1.0), *major group*=.91 (*range*=.50-1.0), *STEM*=1.0 (*range*=.50-1.0), *STEM group*=1.0 (*range*=.65-1.0), *first narrator*=1.0 (*range*=1.0), *first narrator sex*=1.0 (*range*=1.0), *second narrator*=1.0 (*range*=1.0), and *second narrator sex*=1.0 (*range*=1.0).

A total of 9 demographic (*n*=5) and occupation changes (*n*=4) occurred in children's shows. At analysis, we handled these changes the same way we handled such changes in family films (see footnote 12) and prime time (see footnote 31).

⁴². The chi-square for *network* (PBS, Disney, and Nickelodeon) by character *gender* was not significant, $X^2(568, df=2) = .38, p = .83, V^* = .03$.

⁴³. A significant chi-square emerged for *rating* (TV-Y, TV-Y7, TV-G) and character *gender*, $X^2(568, df=2) = 17.00, p < .01, V^* = .17$.

⁴⁴. Smith, S.L., & Choueiti, M. (2011). *Black characters in popular film: Is the key to diversifying cinematic content held in the hand of the black director?* Los Angeles, CA: Annenberg School for Communication & Journalism.

⁴⁵. The chi-square for character *age* by *gender* was significant, $X^2(535, df=4) = 32.25, p < .01, V^* = .25$.

⁴⁶. The chi-square for character *gender* by *parental status* was significant, $X^2(88, df=1) = 7.77, p < .01, \phi = .30$.

⁴⁷. *SRC* and *thinness* differed with gender: *SRC* $X^2(345, df=1) = 4.35, p < .05, \phi = .11$; *thinness*, $X^2(313, df=1) = 13.38, p < .01, \phi = .21$. The analysis for beauty was significant, but the percentage of attractive males (1.8%) and females (5.6%) did not differ by 5%.

⁴⁸. The chi squares for *SRC*, *nudity*, and *thinness* were associated with females' age: *SRC* $X^2(85, df=2) = 7.17, p < .05, V^* = .29$; *nudity* $X^2(85, df=2) = 7.65, p < .05, V^* = .30$; *thinness*, $X^2(80, df=2) = 9.35, p < .01, V^* = .34$. Given the small number of characters and that 1 cell has an expected frequency less than 5 across these three analyses, the results are suggestive and should be interpreted cautiously.

Consistent with family film and prime time analyses, we excluded children (0-12 year olds) and elderly from the analyses. See footnote 19 and 37 for the rationale. Here, we provide the frequency and percentage for female children (0-12 years) by appearance indicator: sexy attire (7.9%, $n=3$); some exposed skin (7.9%, $n=3$); thinness (51.6%, $n=16$); attractiveness (6.8%, $n=4$). None of the appearance indicators were present across the female elderly characters in children's shows.

⁴⁹. U.S. Bureau of Labor Statistics (May, 1, 2012).

⁵⁰. Aubrey, J.S. (2006). Roberts, T.A., & Gettman, J. Y. (2004). Harper, B., & Tiggemann, M. (2008). Dittmar, Halliwell, & Ive, 2006.

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Research Assistants

Fall 2011 RAs: Caroline Bales Douglas Borchert Ariana Case Earl 'Lee J' Cotton Lena Cronin Jacqueline Day Amanda Giuliano Cooper Goldie Kelley Holding Catherine Hough Jo-Shan Hsu Betsy Kwong Sun Young Lee Andrew Lee Miesha Morse Melanie Murray Taryn Nagata Jung Won Park Mariana Perez-Seda Christopher Pousson Nikita Prasad Jessica Saab Lindsey Schuster Elizabeth Scofield Alexa Smith Arianne Smith Tiffany Wang Hyunjung Yoo Angela Yoo	Spring 2012 RAs: Solumto Akabueze Taylor Audette Melita Bintoro Leslie Chen Enlin Chua Wendy Chuong Sarah Clary Samantha D'Ambola Anokhy Desai Jelena Grozdanich Natascha Grundmann Jennifer Hang Gregory Hirshland Michelle Jensen Jeremy Katchen Kaitlin Kogachi Leigh Kramer Kristina Kuhle Sarah Lalani Stephen Los Banos Siyun Mao Rachel Niemoller Chidera Nnorom Min Sun Park Janna Prowell Sasha Rawji Sridevi Reddy Mathew Roniss Alexander Rose Keika Stevenson Ashley Warner Katharine Weimer	Spring 2012 RAs (con't): LaVasjah Williams Jocelyn Wong Spring 2012 RAs (sampling): Stephanie Gall* Natalie Genini Yu-Ting Liu Madison Sanders Spring 2012 STEM RAs: Earl 'Lee J' Cotton Ariana Case Kelley Holding Jo-Shan Hsu Sun Young Lee Melanie Murray Elizabeth Scofield Mahjubin Tuheen Summer 2012 RAs: Ariana Case* Sarah Clary Lauren Howard Yu-Ting Liu* Rachel Niemoller Kate Pieper Ashley Prescott Elizabeth Scofield* Mahjubin Tuheen* Mathew Roniss* *veteran admin team
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Appendix A: Sample of Family Films

# PG-13 Rated Film Titles	# PG Rated Film Titles	# G Rated Film Titles
1 Avatar	51 Alice in Wonderland	101 Toy Story 3
2 The Dark Knight	52 Shrek the 3rd	102 Wall-E
3 Transformers 2: Revenge of the Fallen	53 UP	103 Ratatouille
4 Harry Potter and the Deathly Hallows 2	54 Despicable Me	104 Cars 2
5 Spiderman 3	55 Night at the Museum	105 Dr. Seuss' Horton Hears a Who!
6 Iron Man	56 National Treasure 2: Book of Secrets	106 Rio
7 Indiana Jones /Crystal Skull	57 Alvin and the Chipmunks: Squeakquel	107 The Princess and the Frog
8 Pirates of the Caribbean: At World's End	58 How to Train Your Dragon	108 Gnomeo and Juliet
9 The Twilight Saga: Eclipse	59 Kung Fu Panda	109 Meet the Robinsons
10 Inception	60 Tangled	110 High School Musical 3
11 Star Trek	61 Monsters vs Aliens	111 Santa Clause 3
12 I Am Legend	62 Happy Feet	112 Charlotte's Web
13 The Blind Side	63 Ice Age 3: Dawn of the Dinosaurs	113 Hannah Montana the Movie
14 Hancock	64 Madagascar: Escape 2 Africa	114 Tale of Despereaux
15 The Bourne Ultimatum	65 The Karate Kid	115 College Road Trip
16 Fast Five	66 Tron: Legacy	116 Mr. Bean's Holiday
17 Sherlock Holmes	67 Megamind	117 Mr. Magorium's Wonder Emporium
18 The Simpsons Movie	68 Paul Blart: Mall Cop	118 Space Chimps
19 Thor	69 Marley & Me	119 Winnie the Pooh
20 X-Men Origins: Wolverine	70 The Chronicles of Narnia: P. Caspian	120 Ramona & Beezus
21 Captain America	71 The Smurfs	121 Kitt Kittridge: An American Girl
22 Rise of the Planet of the Apes	72 A Christmas Carol	122 Ponyo
23 True Grit	73 Fantastic Four: Rise of the Silver Surfer	123 Everyone's Hero
24 Quantum of Solace	74 The Last Airbender	124 Fly Me to the Moon
25 Wild Hogs	75 Enchanted	125 The Pirates Who Don't Do Anything
26 2012	76 Bee Movie	126 Seven Days in Utopia
27 The Proposal	77 Cloudy with a Chance of Meatballs	127 Romeo and Juliet: Sealed with a Kiss
28 The Pursuit of Happyness	78 Rango	128 Moondance Alexander
29 Clash of the Titans	79 G-Force	129 The Velveteen Rabbit
30 Grown Ups	80 Hairspray	
31 The Help	81 Bolt	
32 G.I. Joe	82 Bedtime Stories	
33 Little Fockers	83 Hop	
34 Taken	84 Journey to the Center of the Earth	
35 Mama Mia	85 Evan Almighty	
36 Juno	86 Yogi Bear	
37 Rush Hour 3	87 Beverly Hills Chihuahua	
38 The Incredible Hulk	88 The Game Plan	
39 Live Free or Die Hard	89 Percy Jackson & the Olympians: L.T.	
40 Angels & Demons	90 Open Season	
41 Get Smart	91 Bridge to Terabithia	
42 The Curious Case of Benjamin Button	92 Zookeeper	
43 Super 8	93 Where the Wild Things Are	
44 Terminator Salvation	94 Coraline	
45 Four Christmases	95 Eragon	
46 I Now Pronounce You Chuck & Larry	96 Hotel for Dogs	
47 The Other Guys	97 Fred Claus	
48 Blades of Glory	98 The Spiderwick Chronicles	
49 Salt	99 Rocky Balboa	
50 Ocean's Thirteen	100 Mr. Popper's Penguins	

**Appendix B:
Sample of Prime Time Programs**

ABC TV Series	Date	Time
The Middle - "Valentine's Day III"	02/08/12	8:00-8:30PM
Modern Family - "Me? Jealous?"	02/08/12	9:00-9:30PM
Revenge - "Perception"	02/08/12	10:00-11:00PM
Shark Tank	02/10/12	8:00-9:00PM
Primetime: What Would You Do?	02/10/12	9:00-10:00PM
America's Funniest Home Videos	02/12/12	7:00-8:00PM
Pan Am - "Romance Languages"	02/12/12	10:00-11:00PM
The Bachelor	02/13/12	8:00-10:00PM
Castle - "Pandora"	02/13/12	10:00-11:00PM
Body of Proof - "Cold Blooded"	02/14/12	10:00-11:00PM
Happy Endings - "Everybody Loves Grant"	02/15/12	9:30-10:00PM
Grey's Anatomy - "Have You Seen Me Lately?"	02/16/12	9:00-10:00PM
Wipeout - "Winter Wipeout: Valentine's Day Couples"	02/18/12	8:00-9:00PM
Once Upon a Time - "What Happened to Frederick"	02/19/12	8:00-9:00PM
Desperate Housewives - "Get Out of My Life"	02/19/12	9:00-10:00PM
Last Man Standing - "Baxter and Sons"	02/21/12	8:00-8:30PM
Cougar Town - "A Mind With a Heart of Its Own"	02/21/12	8:30-9:00PM
The River - "A Better Man"	02/21/12	9:00-10:00PM
Suburgatory - "Fire With Fire"	02/22/12	8:30-9:00PM
Wipeout - "You Ain't Seen Nothing Yeti"	02/23/12	8:00-9:00PM
Private Practice - "Andromeda"	02/23/12	10:00-11:00PM
20/20 - "Barbara Walters Reports: The Cutting Edge"	02/24/12	10:00-11:00PM

NBC TV Series	Date	Time
The Voice - "The Blind Auditions Pt. 2"	02/06/12	8:00-10:00PM
Smash - "Pilot"	02/06/12	10:00-11:00PM
Whitney - "Lance!"	02/08/12	8:00-8:30PM
Are You There, Chelsea - "The Gynecologist"	02/08/12	8:30-9:00PM
The Office - "Special Project"	02/09/12	9:00-9:30PM
Up All Night - "Day After Valentine's Day"	02/09/12	9:30-10:00PM
Who Do You Think You Are? - "Marisa Tomei"	02/10/12	8:00-9:00PM
The Biggest Loser	02/14/12	8:00-10:00PM
Parks and Recreation - "Dave Returns"	02/16/12	8:30-9:00PM
Grimm - "Game Ogre"	02/16/12	10:00-11:00PM
Smash - "The Callback"	02/18/12	8:00-9:00PM
The Firm - "Chapter Seven"	02/18/12	9:00-10:00PM
Law & Order: SVU - "Theatre Tricks"	02/18/12	10:00-11:00PM
Parenthood - "Remember Me, I'm the One Who Loves You"	02/21/12	10:00-11:00PM
Rock Center with Brian Williams	02/22/12	9:00-10:00PM
Law & Order: SVU - "Hunting Ground"	02/22/12	10:00-11:00PM
30 Rock - "Leap Day"	02/23/12	8:00-8:30PM
Grimm - "Last Grimm Standing"	02/24/12	9:00-10:00PM
Dateline NBC	02/24/12	10:00-11:00PM
Dateline NBC	02/26/12	7:00-8:00PM
Celebrity Apprentice - "Hero Worship"	02/26/12	8:00-9:00PM
Celebrity Apprentice - "Getting Medieval"	02/26/12	9:00-11:10PM

CBS TV Series	Date	Time
How I Met Your Mother - "The Burning Beekeeper"	02/06/12	8:00-8:30PM
The Big Bang Theory - "The Vacation Solution"	02/09/12	8:00-8:30PM
Person of Interest - "Wolf and Cub"	02/09/12	9:00-10:00PM
The Mentalist - "At First Blush"	02/09/12	10:00-11:00PM
Mike & Molly - "Valentine Piggyback"	02/13/12	9:30-10:00PM
Hawaii Five-0 - "I Helu Pu (The Reckoning)"	02/13/12	10:00-11:00PM
NCIS - "Secrets"	02/14/12	8:00-9:00PM
NCIS: Los Angeles - "Crimeleon"	02/14/12	9:00-10:00PM
Unforgettable - "The Following Sea"	02/14/12	10:00-11:00PM
Survivor: One World - "Two Tribes, One Camp, No Rules"	02/15/12	8:00-9:00PM
Rob - "The Baby Bug"	02/16/12	8:30-9:00PM
Undercover Boss - "Checkers & Rally's"	02/17/12	8:00-9:00PM
A Gifted Man - "In Case of Co-dependents"	02/17/12	9:00-10:00PM
CSI: Miami - "Last Straw"	02/19/12	10:00-11:00PM
Two Broke Girls - "And the Kosher Cupcakes"	02/20/12	8:30-9:00PM
Two and A Half Men - "Not in My Mouth"	02/20/12	9:00-9:30PM
Criminal Minds - "A Thin Line"	02/22/12	9:00-10:00PM
CSI: Crime Scene Investigation - "Stealing Home"	02/22/12	10:00-11:00PM
Blue Bloods - "The Life We Choose"	02/24/12	10:00-11:00PM
Rules of Engagement - "Anniversary Chicken"	02/25/12	8:00-8:30PM
48 Hour Mystery - "Fatal Episode, the Producer's Story"	02/25/12	10:00-11:00PM
60 Minutes	02/26/12	7:00-8:00PM
Amazing Race 20 - "You Know I'm Not as Smart as You"	02/26/12	8:00-9:00PM
CSI - "The Two Mrs. Grissoms"	03/03/12	9:00-10:00PM
The Good Wife - "After the Fall"	03/04/12	9:00-10:00PM

FOX TV Series

Date	Time
Fringe - "Welcome to Westfield"	02/10/12 9:00-10:00PM
Fox News Special - "Saving the California Dream"	02/10/12 10:30-11:00PM
Bob's Burgers - "Bed & Breakfast"	02/12/12 7:00-7:30PM
The Simpsons - "The Daughter Also Rises"	02/12/12 8:00-8:30PM
House - "Chase"	02/13/12 8:00-9:00PM
Glee - "Heart"	02/14/12 8:00-9:00PM
New Girl - "Valentine's Day"	02/14/12 9:00-9:30PM
Kitchen Nightmares - "Charlie's"	02/17/12 8:00-9:00PM
Cops - "Kansas City, Missouri; Kansas City, Kansas"	02/18/12 8:30-9:00PM
Alcatraz - "Johnny McKee"	02/20/12 9:00-10:00PM
Raising Hope - "Sheer Madness"	02/21/12 9:30-10:00PM
American Idol - "Final Judgment, Part 1"	02/22/12 8:00-10:00PM
American Idol - "Final Judgment, Part 2"	02/23/12 8:00-9:00PM
The Finder - "Little Green Men"	02/23/12 9:00-10:00PM
Cops - "Street Arrests #2"	02/25/12 8:00-8:30PM
The Cleveland Show - "A Nightmare on Grace Street"	02/26/12 7:30-8:00PM
Napoleon Dynamite - "Scantronica Love"	02/26/12 8:30-9:00PM
Family Guy - "Brothers and Sisters"	02/26/12 9:00-9:30PM
American Dad! - "Hot Water"	02/26/12 9:30-10:00PM

CW TV Series	Date	Time
Ringer - "What are You Doing Here Ho-Bag?"	02/07/12	9:00-10:00PM
Remodeled - "3 Men and a Little Agency"	02/08/12	9:00-10:00PM
Nikita - "Rogue"	02/10/12	8:00-9:00PM
Family Guy - "Blue Harvest"	02/11/12	8:30-9:00PM
Futurama - "Love and Rocket"	02/11/12	9:30-10:00PM
Friends - "The One with the Male Nanny"	02/12/12	7:00-7:30PM
Hart of Dixie - "Aliens & Aliases"	02/13/12	9:00-10:00PM
Hart of Dixie - "Sweetie Pies & Sweaty Palms"	02/14/12	8:00-9:00PM
The Secret Circle - "Return"	02/16/12	9:00-10:00PM
Family Guy - "Something, Something, Something, Dark Side, Part 1"	02/18/12	8:00-8:30PM
Futurama - "That's Lobstertainment"	02/18/12	9:00-9:30PM
Friends - "The One Where No One's Ready"	02/19/12	7:30-8:00PM
Gossip Girl - "Cross Rhodes"	02/20/12	8:00-9:00PM
One Tree Hill - "Last Known Surroundings"	02/22/12	8:00-9:00PM
The Vampire Diaries - "Our Town"	02/23/12	8:00-9:00PM
Supernatural - "Season 7, Time for a Wedding!"	02/24/12	9:00-10:00PM

Cartoon Network TV Series	Date	Time
MAD - "Dolphineus & Ferb"	02/06/12	8:30-9:00PM
King of the Hill - "Pigmalion"	02/07/12	9:00-9:30PM
American Dad! - "Lincoln Lover"	02/07/12	10:30-11:00PM
Lego Ninjago: The Series - "Can of Worms"	02/08/12	8:00-8:30PM
King of the Hill - "Goodbye Normal Jeans"	02/08/12	9:00-9:30PM
Regular Show - "Skips vs. Technology; Under the Hood"	02/09/12	8:30-9:00PM
King of the Hill - "Joust Like a Woman"	02/09/12	9:00-9:30PM
Star Wars: The Clone Wars - "Crisis on Naboo"	02/10/12	8:00-8:30PM
Level Up - "A Heart-Worming Tale"	02/12/12	8:00-8:30PM
Level Up - "Wyatt Presents Avatar in 3D"	02/12/12	8:30-9:00PM
Squidbillies - "Take This Job and Love It"	02/12/12	9:45-10:00PM
Robot Chicken - "Sausage Fest"	02/12/12	10:00-10:15PM
Regular Show - "Butt Dial; Fortune Cookie"	02/13/12	8:00-8:30PM
Level Up - "Bicyclops"	02/14/12	8:00-8:30PM
King of the Hill - "My Own Private Rodeo"	02/15/12	9:30-10:00PM
American Dad! - "Apocalypse to Remember"	02/15/12	10:00-10:30PM
American Dad! - "Four Little Words"	02/15/12	10:30-11:00PM
King of the Hill - "Texas Silksaw Episode"	02/16/12	9:30-10:00PM
American Dad! - "When a Stan Loves a Woman"	02/16/12	10:00-10:30PM
American Dad! - "Joint Custody"	02/17/12	10:30-11:00PM
King of the Hill - "Bad Girls, Bad Girls Whatcha Gonna Do"	02/18/12	9:30-10:00PM
Family Guy - "Petarded"	02/18/12	10:30-11:00PM
Robot Chicken - "Lust for Puppets"	02/19/12	10:15-10:30PM
Family Guy - "Brian the Bachelor"	02/19/12	10:30-11:00PM
King of the Hill - "The Fat and the Furious"	02/20/12	9:00-9:30PM
King of the Hill - "Full Metal Dust Jacket"	02/20/12	9:30-10:00PM
American Dad! - "The Vacation Goo"	02/20/12	10:00-10:30PM
American Dad! - "Meter Made"	02/20/12	10:30-11:00PM
Adventure Time With Finn & Jake - "Too Young; Thank You"	02/21/12	8:30-9:00PM
King of the Hill - "An Officer and A Gentle Boy"	02/21/12	9:30-10:00PM
American Dad! - "Dope and Faith"	02/21/12	10:00-10:30PM
Level Up - "Hampire Weeknight"	02/22/12	8:30-9:00PM
MAD - "Captain Ameri-can't "	02/23/12	8:00-8:30PM
American Dad! - "Most Adequate Christmas Ever"	02/23/12	10:30-11:00PM
Lego Ninjago: The Series - "Tick Tock"	02/24/12	8:30-9:00PM
King of the Hill - "The Miseducation of Bobby Hill"	02/24/12	9:00-9:30PM
King of the Hill - "Be True to Your Fool"	02/24/12	9:30-10:00PM
American Dad! - "Wheels & the Legman & the Case of Grandpa's Key"	02/24/12	10:00-10:30PM
MAD - "Snot Pilgrim"	02/25/12	8:30-9:00PM
God, The Devil and Bob - "Andy Runs Away"	02/25/12	9:00-9:30PM
King of the Hill - "I Never Promised You an Organic Garden"	02/25/12	10:00-10:30PM
King of the Hill - "New Cowboy on the Block"	02/26/12	9:00-9:30PM
Squidbillies - "Family Trouble"	02/26/12	9:30-9:45PM

Disney TV Series	Date	Time
Wizards of Waverly Place - "Meet the Werewolves"	02/06/12	10:00-10:30PM
Phineas and Ferb - "Last Train to Bustville"	02/07/12	10:15-10:30PM
Jessie - "Zuri's New Old Friend"	02/08/12	8:00-8:30PM
A.N.T. Farm - "You're the One That I WANT"	02/08/12	8:30-9:00PM
Wizards of Waverly Place - "My Two Harpers"	02/08/12	10:00-10:30PM
Phineas and Ferb - "Monster From the Id; Gi-Ants"	02/10/12	8:30-9:00PM
Good Luck Charlie - "Teddy on Ice"	02/10/12	10:30-11:00PM
Phineas and Ferb - "Phineas and Ferb and the Temple of Juatchadoon"	02/11/12	9:15-9:30PM
So Random! - "China Anne McClain"	02/12/12	7:30-8:00PM
Austin & Ally - "Kangaroos & Chaos"	02/13/12	10:05-10:35PM
Phineas and Ferb - "Rollercoaster: the Musical! Part 1 & 2"	02/16/12	8:00-8:30PM
Austin & Ally - "Bloggers and Butterflies"	02/17/12	9:40-10:05PM
Jessie - "Used Karma"	02/18/12	9:35-10:00PM
A.N.T. Farm - "Bad RomANTs"	02/18/12	10:00-10:30PM
A.N.T. Farm - "ClairvoyANT"	02/19/12	9:00-9:30PM
A.N.T. Farm - "CANTonese"	02/19/12	10:30-11:00PM
Shake It Up - "Copy Kat it Up"	02/20/12	8:40-9:05PM
Jessie - "Romancing the Crone"	02/20/12	9:05-9:30PM
Jessie - "Are You Cooler Than a Fifth Grader"	02/20/12	9:30-10:00PM
Austin & Ally - "Club Owners & Quinceaneras"	02/21/12	8:00-8:30PM
Fish Hooks - "Just One of the Fish"	02/21/12	10:15-10:30PM
Shake It Up - "Camp it Up"	02/21/12	10:30-11:00PM
A.N.T. Farm - "PerformANTs"	02/22/12	9:00-9:30PM
Austin & Ally - "Tickets & Trashbags"	02/22/12	10:00-10:30PM
Shake It Up - "Three's a Crowd It Up"	02/22/12	10:30-11:00PM
Shake It Up - "Apply it Up"	02/23/12	10:40-11:05PM
A.N.T. Farm - "Some EnchANTED Evening"	02/24/12	8:30-9:00PM
Fish Hooks - "Sixteen Clamandles"	02/24/12	9:15-9:30PM
Jessie - "Take the A Train...I Think"	02/24/12	9:30-10:00PM
Good Luck Charlie - "Teddy's Bear"	02/25/12	10:00-10:30PM
Shake It Up - "Egg It Up"	02/26/12	8:30-9:00PM
Jessie - "The Princess and the Pea Brain"	02/26/12	9:30-10:00PM
Austin & Ally - "Zaliens & Cloud Watchers"	02/26/12	10:00-10:30PM
Austin & Ally - "Deejays & Demos"	03/03/12	9:30-10:00PM

E! TV Series	Date	Time
Kourtney and Kim Take New York - "Voices from Beyond"	02/06/12	9:00-10:00PM
E! Entertainment Special - "Growing Up in Hollywood"	02/07/12	8:00-9:00PM
*The Soup - "Episode 905"	02/09/12	8:00-8:30PM
Kourtney and Kim Take New York - "Questionable Actions"	02/11/12	9:00-10:00PM
Kourtney and Kim Take New York - "Goodbye, New York"	02/12/12	9:00-10:00PM
E! News	02/13/12	9:00-10:00PM
Fashion Police - "The 2012 Grammy Awards"	02/14/12	8:00-9:00PM
E! News Special: Whitney Houston: Last Days of a Legend	02/15/12	9:00-10:00PM
The Soup - "Episode 906"	02/15/12	10:00-10:30PM
Kourtney and Kim Take New York - "Kim Takes Dubai"	02/15/12	10:30-11:00PM
E! News Special: A-List Listings	02/16/12	8:30-9:00PM
Khloe & Lamar - "The Break Up"	02/19/12	7:30-8:00PM
Khloe & Lamar - "The Return of Joe Odom"	02/19/12	8:30-9:00PM
Khloe & Lamar - "Baby Blues"	02/19/12	9:30-10:00PM
True Hollywood Story - "Lindsey Lohan"	02/20/12	8:00-9:00PM
Khloe and Lamar - "A Fine Bromance"	02/20/12	9:30-10:00PM
*Ice Loves Coco - "Baby Got Besties"	02/20/12	10:30-11:00PM
E! News	02/21/12	10:00-11:00PM
*Ice Loves Coco - "Baby Got Bad News"	02/22/12	8:00-8:30PM
Khloe & Lamar - "Rock-a-Bye Lam Lam"	02/22/12	9:30-10:00PM
The Soup - "Episode 907"	02/22/12	10:30-11:00PM
True Hollywood Story - "Ice-T & Coco"	02/23/12	9:00-10:00PM
E! News Special: Actors Unscripted	02/24/12	8:00-8:30PM
Fashion Police	02/24/12	10:30-11:00PM
Fashion Police - "Academy Awards Special"	02/27/12	10:00-11:00PM

*Per the sampling procedures these episodes were copied and their duplicates were included in all analyses.

Nickelodeon TV Series	Date	Time
That 70's Show - "Dine and Dash"	02/06/12	8:00-8:30PM
That 70's Show - "Who Wants it More"	02/06/12	8:30-9:00PM
Friends - "The One with Ross' New Girlfriend"	02/06/12	9:00-9:30PM
George Lopez - "Super Bowl"	02/06/12	10:00-10:30PM
George Lopez - "Girl Fight"	02/06/12	10:30-11:00PM
That 70's Show - "Radio Daze"	02/07/12	8:00-8:30PM
That 70's Show - "Kitty's Birthday"	02/07/12	8:30-9:00PM
Friends - "The One with Five Steaks and an Eggplant"	02/07/12	9:00-9:30PM
George Lopez - "George vs. George"	02/07/12	10:00-10:30PM
Friends - "The One with the Lesbian Wedding"	02/08/12	9:00-9:30PM
Friends - "The One after the Super Bowl"	02/08/12	9:30-10:00PM
George Lopez - "A Kiss is just a Kiss"	02/08/12	10:00-10:30PM
Spongebob Squarepants - "The Abrasive Side; Ear Worm"	02/10/12	8:30-9:00PM
Victorious - "The Worst Couple"	02/11/12	8:00-8:30PM
That 70's Show - "The Promise Ring"	02/12/12	8:00-8:30PM
My Wife and Kids - "Meet the Parents"	02/12/12	9:00-9:30PM
My Wife and Kids - "The Funeral"	02/12/12	9:30-10:00PM
George Lopez - "The Cuban Missus Crisis"	02/12/12	10:30-11:00PM
Friends - "The One with the Birthing Video"	02/14/12	9:30-10:00PM
George Lopez - "Love Bites"	02/14/12	10:30-11:00PM
That 70's Show - "Hyde Gets a Girl"	02/15/12	8:00-8:30PM
That 70's Show - "Uncomfortable Ball Stuff"	02/15/12	8:30-9:00PM
George Lopez - "Split Decision"	02/15/12	10:30-11:00PM
My Wife and Kids - "While Out"	02/16/12	8:00-8:30PM
My Wife and Kids - "Moving on Out"	02/16/12	8:30-9:00PM
That 70's Show - "Bye-Bye Basement"	02/16/12	10:00-10:30PM
That 70's Show - "The Forgotten Son"	02/17/12	10:00-10:30PM
That 70's Show - "Donna's Story"	02/18/12	10:00-10:30PM
That 70's Show - "Eric's Hot Cousin"	02/18/12	10:30-11:00PM
George Lopez - "Jason Tutors Max"	02/19/12	10:00-10:30PM
Friends - "The One With All the Rugby"	02/20/12	9:30-10:00PM
George Lopez - "Wrecking Ball"	02/23/12	9:00-9:30PM
George Lopez - "Landlord Almighty"	02/23/12	9:30-10:00PM
That 70's Show - "Prank Day"	02/23/12	10:30-11:00PM
George Lopez - "George Searches for a Needle in a Haight-Stack"	02/24/12	9:00-9:30PM
George Lopez - "Bachelor Party"	02/24/12	9:30-10:00PM
That 70's Show - "Eric's False Alarm"	02/24/12	10:30-11:00PM
How to Rock - "How to Rock a Music Video"	02/25/12	8:30-9:00PM
Buckets & Skinner's Epic Adventures - "Epic Bobo"	02/25/12	9:00-9:30PM
iCarly - "iBalls"	02/25/12	9:30-10:00PM
FRED: the Show - "Fred the Teen Sitter/The Expired Cow"	02/26/12	7:00-7:30PM
That 70's Show - "Going to California"	02/26/12	8:30-9:00PM
FRED: the Show - "Driver's Fred/Lemon Fred"	03/02/12	8:00-8:30PM
Spongebob Squarepants - "Spongebob vs. the Big One"	03/04/12	7:30-8:00PM

TEEN TV SERIES	DATE	TIME
Ridiculousness - "Johnny Knoxville"	02/06/12	8:30-9:00PM
Caged	02/06/12	10:00-11:00PM
Teen Mom 2 - "Love Comes and Goes"	02/07/12	9:00-10:00PM
Teen Mom 2 - "Falling"	02/07/12	10:00-11:30PM
The Challenge: Battle of the Exes - "Where Did Our Love Go?"	02/08/12	10:00-11:00PM
Jersey Shore - "Free Vinny"	02/09/12	8:00-9:00PM
Jersey Shore - "The Follow Game"	02/09/12	10:00-11:00PM
Jersey Shore - "Nothing But Nice"	02/10/12	8:00-9:00PM
Teen Mom 2 - "Judgment Day"	02/11/12	7:30-9:00PM
Teen Mom 2 - "Season 2 Unseen Moments"	02/12/12	9:30-10:30PM
Ridiculousness - "Jeff Tremaine"	02/13/12	8:00-8:30PM
Teen Mom 2 - "Baby Talk 2"	02/15/12	8:00-8:30PM
Jersey Shore - "Love at the Jersey Shore"	02/17/12	8:30-9:30PM
Jersey Shore - "After Hours"	02/17/12	9:30-10:00PM
I Just Want My Pants Back - "Never Trust a Moonblower"	02/18/12	10:00-10:30PM
Ridiculousness - "The Dingo"	02/19/12	8:30-9:00PM
Ridiculousness - "Big Black II"	02/19/12	9:00-9:30PM
Jersey Shore - "Déjà Vu All Over Again"	02/20/12	8:00-9:00PM
Jersey Shore - "Back Into the Fold"	02/20/12	9:00-10:00PM
The Challenge: Battle of the Exes - "Crazy in Love"	02/23/12	8:00-9:00PM
The Challenge: Battle of the Exes - "Love the Way You Lie"	02/26/12	8:00-9:00PM
Jersey Shore - "Sharp Objects"	02/28/12	8:00-9:00PM

**Appendix C:
Sample of Children's Shows**

2- to 5-Year-Olds

Network	TV Series Title	Episode/Segment Title(s)	Rating
PBS	Curious George	Spy Monkey/Castle Keep	TV-Y
PBS	Cat in the Hat	A Tale About Tales/Sticky Situation	TV-Y
PBS	Super Why	The Elves and the Shoemaker	TV-G
PBS	Dinosaur Train	Camouflage/Family Scavenger Hunt	TV-Y
PBS	Thomas and Friends	Sounds & Smells	TV-G
Disney	Jake and the Neverland Pirates	The Pirate Princess/The Rainbow Wand	TV-Y
Disney	Mickey Mouse Clubhouse	Minnie's Bow-Tique	TV-Y
Nick	Go Diego Go	Welcome Home, Lion Cub	TV-Y
Nick	Bubble Guppies	Boy Meets Squirrel	TV-Y
Nick	Dora the Explorer	Star Catcher	TV-Y
Nick	The Backyardigans	The Tea Party (also known as High Tea)	TV-Y
Nick	Wonder Pets	Save the Nutcracker	TV-Y7
Nick	Team Umizoomi	Umi Fire Truck	TV-Y
Nick	Yo Gabba Gabba	Mystery	TV-Y
Nick	Spongebob Squarepants	Rise and Shine/Waiting/Fungus Among Us	TV-Y7
Nick	Fresh Beat Band	The Case of the Missing Violin	TV-Y
Nick	Max and Ruby	Ruby's Tea Party/Max Is It/Ruby's S. Project	TV-Y
Nick	Power Rangers Samurai	Day Off	TV-Y7
Nick	Ni Hao Kai-Lan	Ni Hao, Halloween	TV-Y
Nick	Kung-Fu Panda: Legends	The Princess & The Po	TV-Y7

6- to 11-Year-Olds

Network	TV Series Title	Episode/Segment Title(s)	Rating
PBS	Curious George	Spy Monkey/Castle Keep	TV-Y
Disney	Phineas and Ferb	Raging Bully/Lights, Candace, Action	TV-G
Disney	Kick Buttowski	If Books Could Kill/There Will Be Nachos	TV-Y7
Disney	Fish Hooks	Fishing for Compliments	TV-G
Nick	BrainSurge	Episode #339 (No Title)	TV-G
Nick	Power Rangers Samurai	Day Off	TV-Y7
Nick	House of Anubis	House of Risk & House of Thieves	TV-G
Nick	True Jackson, VP	Principal for a Day	TV-G
Nick	Victorious	Beck's Big Break	TV-G
Nick	iCarly	iLove You	TV-G
Nick	Drake & Josh	Helicopter	TV-G
Nick	Big Time Rush	Big Time Single	TV-G
Nick	Supah Ninjas	Eternum	TV-G
Nick	Kung Fu Panda: Legends	The Princess & The Po	TV-Y7
Nick	Spongebob Squarepants	Rise and Shine/Waiting/Fungus Among Us	TV-Y7
Nick	T.U.F.F. Puppy	Doom and Gloom/Law and Odor	TV-Y7
Nick	Planet Sheen	Desperate Houseguests/Nesvidanya	TV-Y7
Nick	Fanboy & Chum-Chum	Risky Brizness/Kids in the Hall	TV-Y7
Nick	Penguins of Madagascar	A Visit from Uncle Nigel/Maurice at Peace	TV-Y7
Nick	Rugrats	I Remember Melville/No More Cookies	TV-Y

**Special Table Insert for Industry Sector by Clout:
Family Films, Prime Time, and Children's TV**

Table 3 Employed Characters within 8 Major Industry Sectors in Family Films by Gender and Clout

	Males	Females
<i>Corporate Executives (n=58)</i>		
% of C-suite (Presidents, VPs, GMs, CEOs, CFOs)	96.6% (n=56)	3.4% (n=2)
<i>Business & Financial (n=124)</i>		
% of investors, economic officials, developers	100% (n=12)	0
% of upper management (HR, accountants, loan officers)	95.2% (n=20)	4.8% (n=1)
% of stock brokers, traders, realtors	66.7% (n=12)	33.3% (n=6)
% of clerks, tellers, receptionists	71.2% (n=37)	28.8% (n=15)
% of small business owners (not in clout hierarchy)	95.2% (n=20)	4.8% (n=1)
<i>Politics & Government (n=151)</i>		
% of leadership positions (Pres, Congress, Foreign Ministers)	95.5% (n=63)	4.5% (n=3)
% of mid level politicians (Ambassadors, Envoy, UN Reps)	90.9% (n=20)	9.1% (n=2)
% of staff, secretaries	42.1% (n=8)	57.9% (n=11)
% of clerks (mail, DMV, county)	80% (n=8)	20% (n=2)
% of royals and rulers (not in clout hierarchy)	67.6% (n=23)	32.4% (n=11)
<i>Legal Profession (n=29)</i>		
% of district attorneys, chief justices	100% (n=5)	0
% of lawyers, judges	77.3% (n=17)	22.7% (n=5)
% of clerks, assistants	0	100% (n=2)
<i>Healthcare (n=132)</i>		
% of doctors, hospital managers, CMOs	78.1% (n=50)	21.9% (n=14)
% of nurses, therapists, medics	35.4% (n=17)	64.6% (n=31)
% of aides, caregivers	15% (n=3)	85% (n=17)
<i>Academia (n=82)</i>		
% of administrators, deans, principals, headmasters	61.5% (n=8)	38.5% (n=5)
% of professors, committee heads	87.5% (n=14)	12.5% (n=2)
% of teachers (high school, jr. high, elementary)	41.2% (n=21)	58.8% (n=30)
% of day care workers, receptionists	0	100% (n=2)
<i>Journalism (n=150)</i>		
% of editors in chief	100% (n=4)	0
% of reporters, producers, editors, photojournalists	53.6% (n=75)	46.4% (n=65)
% of assistants, sales	33.3% (n=2)	66.7% (n=4)
<i>Media, Entertainment, & the Arts (n=257)</i>		
% of content creators, agents, managers, curators	65.8% (n=52)	34.2% (n=27)
% of talent (actors, musicians, models)	69.6% (n=94)	30.4% (n=41)
% of assistants, receptionists	59.3% (n=16)	40.7% (n=11)
% of small business owners (not in clout hierarchy)	50% (n=8)	50% (n=8)

Note: The table only includes characters with an identifiable gender. Characters in major groups 1 through 5 are eligible for inclusion in this qualitative analysis.

Table 8 Employed Characters within 8 Major Industry Sectors in Prime Time by Gender and Clout

	Males	Females
<i>Corporate Executives (n=50)</i>		
% of C-suite (Presidents, VPs, GMs, CEOs, CFOs)	86% (n=43)	14% (n=7)
<i>Business & Financial (n=148)</i>		
% of investors, economic officials, developers	57.1% (n=4)	42.9% (n=3)
% of upper management (HR, accountants, loan officers)	84.6% (n=33)	15.4% (n=6)
% of stock brokers, traders, realtors	25% (n=3)	75% (n=9)
% of clerks, tellers, receptionists	55.9% (n=38)	44.1% (n=30)
% of small business owners (not in clout hierarchy)	90.9% (n=20)	9.1% (n=2)
<i>Politics & Government (n=44)</i>		
% of leadership positions (Pres, Congress, Foreign Ministers)	72.2% (n=13)	27.8% (n=5)
% of mid level politicians (Ambassadors, Envoy, UN Reps)	69.2% (n=9)	30.8% (n=4)
% of staff, secretaries	66.7% (n=2)	33.3% (n=1)
% of clerks (mail, DMV, county)	100% (n=5)	0
% of royals and rulers (not in clout hierarchy)	60% (n=3)	40% (n=2)
<i>Legal Profession (n=79)</i>		
% of district attorneys, chief justices	100% (n=4)	0
% of lawyers, judges	64.3% (n=45)	35.7% (n=25)
% of clerks, assistants	20% (n=1)	80% (n=4)
<i>Healthcare (n=175)</i>		
% of doctors, hospital managers, CMOs	70.4% (n=81)	29.6% (n=34)
% of nurses, therapists, medics	45.7% (n=21)	54.3% (n=25)
% of aides, caregivers	14.3% (n=2)	85.7% (n=12)
<i>Academia (n=69)</i>		
% of administrators, deans, principals, headmasters	61.5% (n=8)	38.5% (n=5)
% of professors, committee heads	75% (n=6)	25% (n=2)
% of teachers (high school, jr. high, elementary)	56.5% (n=26)	43.5% (n=20)
% of day care workers, receptionists	50% (n=1)	50% (n=1)
<i>Journalism (n=61)</i>		
% of editors in chief	0	100% (n=1)
% of reporters, producers, editors, photojournalists	61% (n=36)	39% (n=23)
% of assistants, sales	0	100% (n=1)
<i>Media, Entertainment, & the Arts (n=864)</i>		
% of content creators, agents, managers, curators	72.7% (n=88)	27.3% (n=33)
% of talent (actors, musicians, models)	53% (n=352)	47% (n=312)
% of assistants, receptionists	47.8% (n=22)	52.2% (n=24)
% of small business owners (not in clout hierarchy)	45.5% (n=15)	54.5% (n=18)

Note: The table only includes characters with an identifiable gender. Characters in major groups 1 through 5 are eligible for inclusion in this qualitative analysis.

Table 12 Employed Characters within 7 Major Industry Sectors in Children's Series by Gender and Clout

	Males	Females
<i>Corporate Executives (n=7)</i>		
% of C-suite (Presidents, VPs, GMs, CEOs, CFOs)	71.4% (n=5)	28.6% (n=2)
<i>Business & Financial (n=3)</i>		
% of upper management	100% (n=1)	0
% of front desk (reception)	50% (n=1)	50% (n=1)
<i>Politics & Government (n=6)</i>		
% of leadership positions (Pres)	100% (n=1)	0
% of front desk (mailroom)	100% (n=1)	0
% of royals and rulers (not in clout hierarchy)	100% (n=4)	0
<i>Healthcare (n=10)</i>		
% of doctors, dentists	66.7% (n=2)	33.3% (n=1)
% of nurses, personal trainers	20% (n=1)	80% (n=4)
% of front desk (reception, mailroom)	100% (n=2)	0
<i>Academia (n=21)</i>		
% of administrators (principals, headmasters)	83.3% (n=5)	16.7% (n=1)
% of teachers (high school, jr. high, elementary)	80% (n=12)	20% (n=3)
<i>Journalism (n=1)</i>		
% of reporters	100% (n=1)	0
<i>Media, Entertainment, & the Arts (n=48)</i>		
% of directors, producers, agents	85.7% (n=6)	14.3% (n=1)
% of talent (actors, musicians, models)	63% (n=17)	37% (n=10)
% of assistants, receptionists	41.7% (n=5)	58.3% (n=7)
% of small business owners (not in clout hierarchy)	100% (n=2)	0

Note: The table only includes characters with an identifiable gender. Characters in major groups 1 through 5 are eligible for inclusion in this qualitative analysis.