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Do you see what I see? A character analysis of health risk behaviors in television shows popular with Black adolescents in the US

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Abstract

Adolescents spend many hours per day watching television, and there are racial differences in time spent watching television and in show preferences. Prior research suggests there are also differential associations in how exposure to media content affects adolescent behavior. This study examines the demographic representation of main characters and health risk behaviors (i.e., sex, alcohol use, violence, bullying, and their combinations) portrayed in television content popular with Black and non-Black adolescents. A content analysis of television show characters (n=377) from the 2014–15 season was conducted on shows popular with 14–17 year old adolescent audiences in the United States. Group popularity was determined by Nielsen ratings segmented by Black and non-Black (primarily White) adolescents. Results suggest that character representation varies by whether shows were popular with Blacks or others, and that risk portrayals are common in all popular content with few group differences. Implications for adolescent behavior are discussed.

Keywords

adolescents; content analysis; television; risk behavior; sex; alcohol; violence; race differences

Television is a cultural mainstay that entertains and informs. Watching television (and movie) content continues to dominate adolescents' time with media, even more than the new "shiny object" that is social media (Rideout, 2015). The reasons that adolescents watch television are as varied as the programming available to them. Diversity of television content makes it possible for adolescents to be purposeful about their media choices, and better meet their needs and interests more accurately (Katz, Blumler, & Gurevitch, 1973). It follows, therefore, that different groups of youth exhibit different patterns of television viewing. For example, among adolescents who watch television, Black adolescents spend almost double the amount of time watching television as compared to Whites (Jordan et al. 2010; Rideout, 2015). Black adolescents also watch more television shows with Black characters (Ellithorpe & Bleakley, 2016). Little is known, however, about differences in the risk behavior content and character attributes to which Black and non-Black adolescents are exposed.

Media studies show that exposure to specific content on television and through other media, such as sex (Brown et al., 2006; Collins, 2004; Hennessy, Bleakley, Fishbein, & Jordan, 2009), aggression (Anderson, Bushman, Donnerstein, Hummer, & Warburton, 2015), tobacco (Dal Cin, Stoolmiller, & Sargent, 2012; Sargent et al., 2005; Sargent et al., 2002), alcohol (Sargent, Wills, Stoolmiller, Gibson, & Gibbons, 2006; Wills, Sargent, Gibbons, Gerrard, & Stoolmiller, 2009) and relational aggression programming (Coyne, Linder, Nelson, & Gentile, 2012; Coyne et al., 2011; Ward & Carlson, 2013), is linked with youth risk behaviors. These risk behaviors can lead to adverse health outcomes during adolescence and into adulthood. In some cases, exposure to television content has been linked to such outcomes; for example, Chandra et al (2008) found that adolescent exposure to high amounts sexual content on television was prospectively associated with teen pregnancy 3 years later. There is also some evidence for racial differences in the extent to which exposure to risky content on television or in movies is associated with adolescent behavior. Studies have shown that exposure to mainstream sex content (Brown et al., 2006; Hennessy et al., 2009) and tobacco content (Jackson, Brown, & L'Engle, 2007) is not associated with risk behavior among Black adolescents, or at least is much weaker compared to the relationship between media and behavior among Whites (Gibbons et al., 2010; Tanski, Stoolmiller, Gerrard, & Sargent, 2012). However when Black-oriented media (Bleakley, Ellithorpe, Hennessy, Jamieson et al., 2017; Dal Cin, Stoolmiller, & Sargent, 2013) or character race (i.e., Black characters) are considered, media effects become apparent. This presence of weak effects, or the absence of effects entirely among Black adolescents, who consume more television than any other racial group (Rideout, 2015), is a paradox.

What aspects or features of television content result in media effects with some groups (i.e., White teens) and less so in others (Black teens)? As noted, a significant relationship between media risk exposure and corresponding risk behavior is observed in Black adolescents when examining movie content that includes primarily Black characters. In this study, we examine the demographic attributes of the characters in television shows popular with both Black and

non-Black¹ adolescents to add to our understanding of variations in media effects and its link to health disparities. Main characters in the top 30 shows with the highest ratings estimates in each adolescent group (i.e., Black and non-Black) were included in the analysis. The implications of this study can contribute to our understanding of media influence on adolescent risk behaviors.

Learning from television through behavioral modeling

Social Cognitive Theory (SCT) explains that observational learning occurs most effectively when the model is perceived to be attractive and similar to the audience member (Bandura, 1977, 1994). Because adolescents engage in observational learning, attributes of the characters that adolescents watch on television are consequential, especially in the absence of their own experiences (Nabi & Clark, 2008). Similarity may be assessed through phenotypic attributes, such as gender and race, and/or other interests or characteristics such as emotional states, social class, grade level, athletic participation, and so on (Hoffner & Buchanan, 2005). The extent to which an adolescent perceives s/he is similar to a character informs how much the adolescent identifies with character (Cohen, 2001). Identification, and the rewards and punishments (i.e., consequences) for performing a behavior that appears onscreen, can influence whether an adolescent decides to adopt the behavior (Cohen, 2006; van Hoof, de Jong, Fennis, & Gosselt, 2009).

SCT is widely cited as a mechanism through which media content affects behavior. If TV characters are more similar to their adolescent audience, these adolescents may be more likely to adopt the behaviors modeled onscreen. Thus, we would expect the risk behaviors exhibited by Black characters to matter more for predicting the likelihood that Black adolescents will enact the modeled behaviors, as compared to non-Black characters. This idea is reflected in the prototype willingness model, which states that evaluations of persons who perform a particular behavior with regard to similarity and favorability are likely to predict willingness to perform a behavior (Gerrard, Gibbons, Houlihan, Stock, & Pomeroy, 2008).

Portrayal of health risk behaviors on television

The literature on the portrayal of health risk behaviors in media focuses more on movies and music videos than television programming. Nevertheless, numerous studies provide evidence that sex (Kunkel, Eyal, Finnerty, Biely, & Donnerstein, 2005; Kunkel et al., 2007), alcohol (Russell & Russell, 2009), and aggression/violence (Glascock, 2008; Linder & Lyle, 2011) are highly prevalent on television programs. Direct, indirect, and social aggression (all slightly different, but generally comparable to bullying) also commonly occur in both reality and non-reality programming (Coyne & Archer, 2005; Coyne et al., 2011).

The onscreen depiction of risk health behaviors often portrays these behaviors in a positive light with few, if any, negative consequences (Pinkleton, Austin, Cohen, Chen, & Fitzgerald,

¹In this paper, we use the term “non-Black” for consistency with how Nielsen categorized audience race for the purposes of our ratings report. “Non-Black” primarily consists of White adolescents, but includes a slim percentage of other races that may have been sampled.

2008; Will, Geller, Porter, & DePasquale, 2005). Moreover, the glamorization of risk in media is positively associated with risk-taking behaviors, favorable cognitions, and related favorable emotional states (Fischer, Greitemeyer, Kastenmueller, Vogrincic, & Sauer, 2011).

Risk behaviors such as alcohol use, sex, and violence may co-occur in that they are performed in combination with one another. These behaviors tend to cluster, both on and off-screen (Jessor, 1991). Adolescents' propensity to engage in more than one risky behavior at a time can exacerbate any threat to adolescents' health. For example, 20.6% of sexually active adolescents drank alcohol before engaging in sexual intercourse (Centers for Disease Control and Prevention, 2015), and alcohol involvement prior to sexual intercourse is related to an increased risk for sexually transmitted infections (Santelli, Robin, Brener, & Lowry, 2001; Yan, Chiu, Stoesen, & Wang, 2007) and sexual assault (Abbey, 2002). Portrayals of behavioral combinations are also fairly common in movies and other media popular with youth (Bleakley, Romer, & Jamieson, 2014; Ellithorpe et al., 2017), and exposure to co-occurring alcohol and sex in television or movie content has been linked with adolescents' intention to combine alcohol and sex (Bleakley, Ellithorpe, Hennessy, Khurana et al., 2017); (movies only; O'Hara, Gibbons, Li, Gerrard, & Sargent, 2013). Hence, it is important to consider television characters' portrayal of both single and combined risk behaviors.

Flynn et al (2015) found that sexual activity, drinking, and smoking cigarettes were prominent among the 622 characters from their MTV reality programming sample (e.g., *Jersey Shore*) in their sample. They conducted an analysis of character demographics, differences in the performance of risk behaviors, and reported age and race differences for drinking (e.g., less drinking among adolescents than young adults, and White characters drank less than Black characters) as well as gender differences in sexual activity. Additionally, engagement in such risk behaviors was correlated with one another, suggesting that characters who were risky in one behavioral domain were also more likely to be risky in others.

Current study and research questions

Many analyses focus only on networks and primetime shows (Fisher, Hill, Grube, & Gruber, 2004; Glascock, 2001; Lauzen, Dozier, & Horan, 2008; Parrott and Parrott, 2015; Russell & Russell, 2009) whereas others include samples of shows popular with specific groups like children (Byrd-Bredbenner, Finckenor, & Grasso, 2003), tweens (Signorielli & Bievenour, 2015), and adolescents (Coyne & Archer, 2004). There is limited research on the portrayal of risk behaviors in shows popular with Black youth. Glascock (2003) analyzed shows and characters on "non-traditional networks" (i.e., Fox, WB, UPN) due to their more racially diverse programming. His analysis showed that females were underrepresented but Black characters appeared proportional to their population representation. The analysis also investigated verbal and physical aggression by the gender and race of characters, finding that it varied by genre.

This paper fills a gap in the literature by analyzing shows popular with Black adolescent audiences and comparing those shows to the ones popular with non-Black adolescents. By focusing on such shows with high Nielsen ratings among Black adolescents, we are able to

identify characters Black adolescents are seeing onscreen, not just those characters in prime-time shows or non-traditional networks. Because of the time spent watching television and movies, Black teens have a large and varied media diet (Ellithorpe & Bleakley, 2016). A comparison of television ratings of shows popular with Black and non-Black youth found that shows popular with Black adolescents contained more racially diverse characters, i.e., fewer White characters, than mainstream shows they had also watched (Ellithorpe & Bleakley, 2016). Our research questions focus not only on the character demographics of shows popular with Blacks and non-Blacks, but also about the extent to which health risk behaviors and behavioral combinations are portrayed in the shows on each list, and whether there are differences between the lists. Our research questions are the following: RQ(1) What are the demographic traits of characters in television shows popular with Black adolescent audiences compared to programs popular with and non-Black adolescent audiences?; RQ(2) How often do characters in these shows engage in health risk behaviors (i.e., alcohol, sex, violence, bullying) and behavioral combinations (i.e., alcohol/sex; alcohol/violence; sex/violence; alcohol/sex/violence.)? ; RQ(3) Does the portrayal of health risk behaviors vary by show popularity and genre?; RQ(4) Does the portrayal of health risk behaviors vary by character demographics?

Methods

Television Show Selection

Nielsen program ratings estimates for adolescents aged 14–17 were used to determine the television shows that would be coded. We sampled 14–17 year old teens because for most youth it is during this age range that their first experience with risk behaviors occurs (Centers for Disease Control and Prevention, 2015). The pool of possible shows was from the 2014–2015 television season and aired between September 22, 2014 and June 28, 2015. The ratings estimates were an aggregate of the ratings for episode or episodes airing (live +7 days) for each show during the period of September 22, 2014 and June 28, 2015. Because we were interested in describing and comparing characters in shows popular with Black adolescents, the lists we created based on Nielsen data for the top 30 shows popular with Black adolescents and the top 30 shows popular with non-Black adolescents. “Non-Black” adolescents in the Nielsen sample were primarily White adolescents, but did include other races as well (e.g., Asian).

Only serial narrative content was included due to the SCT focus on narrative scripts. The following categories were included: child live, child day, and child multi-weekly (e.g., *K.C. Undercover*), daytime drama (e.g., *Days of Our Lives*), evening animation (e.g., *The Simpsons*), general drama (e.g., *Empire*), popular music (e.g., *Love and Hip Hop*), and situation comedy (e.g., *Modern Family*). Note that some included categories had sub-categories that were excluded. For example, “popular music” included scripted and reality content on channels such as MTV and VH1 that were included in the list of narrative television, but music videos and other musical acts were not included on a case-by-case basis. In addition, any show where the majority of characters were not human eliminated from the pool on a case-by-case basis.

Repeat airings of content where no new episodes aired in the 2014–15 season was another issue to consider. Usually this meant that cable channels were airing repeats of earlier episodes or that a show was purchased for syndication. Only shows where the number of repeats aired were equivalent to at least one season of that show were included. The repeat shows included in the list were mostly non-syndication repeats (e.g., *That's So Raven*).² However, there were a few shows in syndication form that made the lists: *How I Met Your Mother*, *King of the Hill*, and *The Cleveland Show*.

Only shows where the majority of the season was included in the ratings (i.e., the majority of episodes had aired by the cut-off date) were used. It is sometimes the case that shows start late in the season, and many of the episodes air after the official end of the season (starting in the summer). Four shows were excluded based on this criterion. The top 30 shows remaining on the lists for non-Black and Black adolescents were selected for coding. Four overlapping shows appeared on the lists for both groups. The total number of shows coded was 56; 26 popular with non-Black adolescents, 26 popular with Blacks, and four overlap.

Creating and coding the episode pool.—Episodes airing during the 2014–15 seasons were included in the coding pool. For those shows that did not feature new episodes during the 2014–15 season (e.g., *How I Met Your Mother* ended in 2013–14; *The Cleveland Show* ended in 2012–13), the final season was used. A few shows had two seasons straddle the time period being coded. For example, *Austin & Ally* aired five episodes from the end of Season 3 from September to November 2014, and then aired 10 episodes from the beginning of Season 4 from January to July 2015. In these cases, all episodes that aired in the time period from September 2014 to July 2015 were included in the coding pool. To obtain the titles and episode numbers for each show, the official network website was consulted. In cases where the network did not maintain a list of episodes but the episodes were on official streaming websites such as Hulu.com or Netflix.com, the titles were taken from that site and cross-checked with IMDB.com. IMDB.com and the episode list on Wikipedia.org were consulted in tandem and cross-checked together in the few cases where the network and streaming sites both lacked the episode information. A random number generator (from random.org) was used to select the subset of episodes that would be coded for each show. The number of episodes to be coded was decided based on previous research (Manganello, Franzini, & Jordan, 2008). If a show had ten or fewer episodes in the 2014–2015 season, three episodes were selected. If a show had more than ten episodes, five episodes were selected.

Characters.—There were 337 main characters coded across the 56 shows. Up to 8 main characters were coded for each show, but on average shows in the sample had 6.7 (SD=1.29) characters. Main characters were those listed on the back of the DVD and/or were featured on the cover photo of the box. If there are fewer than eight characters on the cover, [IMDB](http://IMDB.com) was used to supplement. For ensemble shows, the main characters are largely limited to characters who appear in the most episodes. In shows popular with non-Black adolescents

²According to Nielsen, non-syndication means the original network is airing the repeats, syndication means they are airing on a different network.

there were 174 characters; 136 characters in shows on the Black popularity list, and 27 characters in the overlap shows. Characters were coded for age, race, and sex. Krippendorff's α for character race was 0.93; age 0.87, and sex 0.93. For age of characters, coders were trained on age ranges rather than exact age of character, which are informed by context (e.g., whether a character is in high school, working a full time job, can legally drink). All ages were based on the character being portrayed, not the actual age of the actor portraying the role. We had a separate reliability training process for demographics of characters.

Coding of Content

The selected television episodes were coded in five minute segments by six coders who were trained for this project. Four coders were undergraduate students at the sponsoring institution who worked part-time and two coders were recent college graduates who were employed full-time to work on the project. All coders participated in the same training process, watched the same training material, and were blinded to the study purpose and hypotheses. The coders achieved intercoder reliability of at least .80 based Krippendorff's Alpha (Hayes and Krippendorff, 2007).

Single risk behaviors.—Dichotomous variables were created indicating whether each character was involved in a given behavior - sex, violence, alcohol, and bullying - at any point throughout the selected episodes. Reported reliabilities are for the presence of the behavior in a five minute segment. Sexual behavior was defined as any type of sexual contact, ranging from kissing on the lips to explicit intercourse (Krippendorff's $\alpha=0.93$). Alcohol portrayal was defined as a character being directly involved in any activity related to alcohol, ranging from handling of bottles to observed consumption (Krippendorff's $\alpha=0.94$). Violence was defined as intentional acts to inflict injury or harm (Yokota & Thompson, 2000) (Krippendorff's $\alpha=0.94$). Aggression in sports games (e.g., tackling, boxing) was excluded because we did not consider there to be true intent to harm and there are typically agreed upon rules of conduct during the sport. Both the character initiating and the character receiving were coded as being involved in violence. Bullying was coded among child and adolescent characters only and was defined as any aggressive and threatening behavior in which an individual tends to torment others, either through verbal harassment or physical assaults, or through more subtle methods of coercion (Krippendorff's $\alpha=0.93$). This intimidation of others could be by the real or threatened infliction of physical, verbal, written, electronically transmitted, or emotional abuse.

Behavioral combinations.—Combined behaviors on the segment level were when the *same character* was coded as engaging in more than one risk behavior in a five-minute segment. The possible combinations were sex and alcohol, violence and alcohol, sex and violence, and sex, violence, and alcohol. (Bullying prevalence was too low to examine in combinations.) For example, when Barney Stinson drinks alcohol shortly before having sexual intercourse in *How I Met Your Mother*, it was coded as a combination of sex and alcohol.

Statistical Analysis

The unit of analysis was the character. Characters were coded by age group (0–12, 13–20, 21–40, 41–65), sex, and race-ethnicity (White, Black, Hispanic, Asian). Characters coded as “65+ years” were excluded from the analysis because there were not enough for group comparisons ($n=9$), as well one character coded as “Other” (for racial group). Programs were coded by popularity (popular with non-Blacks, popular with Blacks, popular with both/overlap) and by genre. Frequencies of character demographics across show popularity were computed. Dichotomous variables were created to indicate whether a main character engaged in any single risk behavior (i.e., alcohol use, sexual activity, violence, and bullying) and combination risk behavior (i.e., alcohol and sex; alcohol and violence; sex and violence; alcohol, sex, and violence). Proportions of characters involved in each risk behavior and combination behavior are reported. Logistic regressions were conducted in Stata 14.0 to test for differences in proportions of risk behavior occurrences across show popularity, genre, and across categories of character demographics (age group, sex, and racial/ethnic group). Clustering by television show was used to adjust standard errors to account for the fact that multiple characters appeared in each show.

Results

What are the demographic traits of characters in television shows popular with Black adolescent audiences compared to programs popular with and non-Black adolescent audiences (RQ1)?

Descriptive statistics on the characters in the 56 shows are in Table 1. The information is stratified according to which show popularity list (i.e., non-Black, Black, or overlap) the characters appeared. Overall, the majority of characters (47.5%) on these shows were 21–40 years old, male (59.9%), White (66.4%), and were featured in primarily dramas (39.2%) or comedies (39.8%). As shown in Table 1, with the exception of sex, there were statistically significant differences in most demographic categories by show popularity.

The most common age group of characters in shows popular with Black adolescents was 13–20 years (41.9%; 10.9% for Whites and 14.8% in the overlap shows), while the most common age group of characters in the non-Black list was 21–40 years (58.6%; 32.5% for Blacks; 51.9% overlap). Race of the characters also varied by show popularity. Almost three-quarters (72.5%) of the characters in shows popular with non-Black adolescents were White, which was statistically different from 44.4% of White characters in overlap shows. Additionally, characters from the overlap shows had significantly more Black characters (51.9%) than on either of the other lists (13.8% White; 24.6% Black). Genre differences emerged as well; about 52% of characters on the non-White shows were in dramas, compared to 19.9% on the Black list. Note that that 52.2% of the characters on shows popular with Black adolescents were from “child” shows. Child shows did not appear on either non-Black or overlap lists.

How often do characters in these shows engage in health risk behaviors (i.e., alcohol, sex, violence, bullying) and behavioral combinations (i.e., alcohol/sex; alcohol/violence; sex/violence; alcohol/sex/violence.) (RQ2)?

Table 2 provides the overall proportions of character involvement in risk behaviors. Over half of all characters were involved in violent content, and more than one-third were involved in sex and alcohol. Bullying and behavioral risk combinations were less frequent.

Does the portrayal of health risk behaviors vary by show popularity and genre (RQ3)?

Figure 1 shows character involvement in risk behaviors by show popularity. Characters in shows popular with both groups (i.e., overlap shows) had significantly more violence than the non-Black shows (OR= 4.21, CI 1.60,11.10, $p < .01$) but there were no differences in character involvement in sex, alcohol, and bullying. However, overlap shows had significantly more characters involved in almost all the risky behavior combinations: alcohol and violence [overlap vs non-Black: OR= 6.816, CI 1.66,28.05, $p < .01$; overlap vs Black: OR= 7.486, CI 1.61, 34.92, $p < .01$]; sex and violence OR=9.80, CI 2.18, 44.1, $p < .01$; overlap vs Black: OR= 4.94, CI 1.17, 20.8, $p < .05$]; and alcohol, sex, and violence [statistical comparisons not possible due to nearly empty or empty cells]. The differences by show popularity were not significant for alcohol and sex combinations when the standard errors were adjusted for show. The differences were only significant without clustering.

As shown in Figure 2, the only difference by genre in characters' portrayals in risk behaviors was for sexual content: about one-fifth of characters from shows in the child category were involved in sex, compared to twice that in dramas [OR= 0.35, CI .14,.91, $p < .05$] or comedy [OR= 0.37, CI .16, .88, $p < .05$].

Does the portrayal of health risk behaviors vary by character demographics (RQ4)?

Table 2 also shows character involvement in risk behaviors by character demographics. Older characters were significantly more likely to be involved with alcohol compared to either of the younger age groups [13–20 v 21–40: OR= 0.103 CI .031–.345, $p < .001$; 13–20 v 41–65: OR= 0.111 CI .033–.377, $p < .001$]. With regard to sexual content, almost half of characters ages 21–40 years old were involved in sexual portrayals compared to about one-third of characters ages 13–20 years and 41–65 years. However, none of these differences were statistically significant; only the difference between 13–20 vs 21–40 approached significance ($p < .10$). The youngest group of characters, ages 0–12, had significantly less involvement in sexual content compared to all the other age groups [13–20: OR= 0.11 CI .013–.95, $p < .05$; 21–40: OR= 0.06 CI .007–.45, $p < .01$; 41–65: OR= 0.10 CI .01,.83, $p < .05$]. There were no gender or race statistical differences in characters involved in risky content.

Discussion

Adolescents' spend much of their time watching television and movie content. Black adolescents watch more television than any other group, but media effects tend to be smaller or absent when compared to the effects from media on their White counterparts (Brown et al., 2006; Dal Cin et al., 2013; Hennessy et al., 2009). Findings from this content analysis

may help to explain why this is the case. Popular shows among Black and non-Black adolescents varied in their representation of characters, primarily by age and race. Single and combined health risk behaviors were frequently portrayed across shows in both groups, and those characters in mutually popular shows feature the highest proportions of portrayed risk. Portrayals of health risk behaviors such alcohol and sexual activity varied only by age, but all characters bullied and were involved with violence at similar rates. Violent content portrayals appeared more often than any other risk behavior.

Analyzing the popularity of shows watched by Blacks and non-Blacks as we did here gives much insight into the behaviors that may result from such TV exposure and helps us better understand how media effects within these groups may be working. Overall, the majority of characters were White, regardless of show popularity. Characters in shows popular with both groups (i.e., on both lists) were more racially diverse: there were significantly more Black characters in these overlap shows compared to characters from the non-Black and Black lists. Although the overlap group only included 27 characters from four shows, it is consistent with research that shows popular television is more diverse compared to movies (Institute for Diversity and Empowerment at Annenberg, 2016), and that there is crossover in that White audiences are watching content with primarily Black characters (Nielsen, 2017). Contrary to research on reality television (Flynn et al., 2015), representation of male and female characters was equivalent across all popularity lists.

One demographic that most strongly differentiated programs was character age. Nearly 60% of characters in shows popular with non-Black adolescents were 21–40 years old, who had the high rates of alcohol and sex portrayals. Over half of characters in shows popular with both groups were also 21–40 years old. In contrast, most characters in shows popular with Black adolescents were adolescents (13–20 years old). This is largely due to the popularity of child genre shows among Black adolescents. Shows in this genre included tween-centered and syndicated shows, many of which were featured on Disney channels (e.g., *Hannah Montana*, *That's So Raven*). Because characters involved in alcohol portrayals were more likely to be 21–40 years old, audiences of shows popular with non-Blacks and overlap shows seem more likely to be exposed to alcohol compared to Black audiences. However, characters of all ages were equally and frequently violent and sexual (except for sex content among characters ages 0–12).

It is not clear why the children's programming is popular with Black adolescents more than for their non-Black counterparts. Black adolescents spend more time watching television, so in addition to watching popular prime time shows it is possible that they are also spending time watching children's programming on Disney channel and the like before and after prime time. However, future research may wish to further evaluate this difference in watching patterns by genre more carefully.

Character age is an important attribute to consider when trying to understand which characters teen audiences may copy in their behavior. As SCT dictates, model similarity is a key factor in the adoption of behaviors gleaned from observational learning (Bandura, 1977). The role that character age plays in identification, more so than other demographic characteristics such as race, is supported in the literature (e.g., van Hoof et al., 2009). Thus,

the influence of behaviors modeled by adolescent characters is likely to be particularly strong among Black adolescents, who are watching more shows with younger characters. Importantly, these characters are less likely than characters of other ages to portray risky health behaviors. It is possible that this may help to account for why Black adolescents, despite watching more television than White adolescents, are less likely to report increased risky behaviors – the television they are watching is not offering as many similar models engaging in those behaviors. Future research should continue this line of questioning.

One question is whether differences in the character portrayals of these risk behaviors might be relevant to explaining differential media effects. Higher proportions of the risk behaviors are portrayed by young adults (i.e., 21–40 years); shows popular with non-Blacks feature more young adults compared to Black shows, in which characters are mostly children and adolescents who are less likely to portray alcohol and sex (although the difference in proportions for sex content between adolescents (.31) and young adults (.48) was non-significant when clustering by show, $p=.08$). Although we do not link this specific content to individual behavior data, it is plausible that because Black adolescents see characters (their age) who they may be more likely to identify with; these are characters who are less likely to engage in alcohol and sex. Non-Black adolescents may identify with characters differently. Perhaps age is an important consideration for character involvement studies and more empirical research is needed to help clarify what characteristics other than race non-Blacks and Blacks are likely to consider in their perceived similarity with media characters. We know that race is one aspect of character identification. For example, Black adolescents tend to watch content with more racially diverse diversity, likely to observe characters from their own identity groups (Ellithorpe & Bleakley, 2016; Harwood, 1997). Research indicates that identification with popular Black characters is related to higher self-esteem among Black adolescents (Ward, 2004) and issues of ethnic identity during adolescence are particularly salient for Black youth.

With regard to the portrayal of risk behaviors, character portrayals of sex, alcohol, and violence were prevalent in shows popular with all adolescents ages 14–17 years. Characters were involved in violent content most frequently (54%), followed by alcohol and sex (both at 38%); bullying at 17%, and 10% of characters combined alcohol and sex. However, when analyzed by popularity, higher proportions of characters engaging in violence and risky behavioral combinations were found in the shows popular with both non-Blacks and Blacks. Trends indicated that overlap shows were riskier across all behaviors, but some differences did not achieve significance when analyses were clustered by show. Nevertheless, popular shows featured high rates of character involvement in risk behaviors. That is, characters in shows popular with all adolescents were generally riskier. It is not clear how the risky behavioral content is related to show ratings—it is possible that the risky content drives popularity, or that the shows are popular for other reasons but just happen to feature a lot of risky content.

Limitations and Future Research

There are some limitations to this study. First, we only considered scripted/narrative shows, and reality television programs are also popular among adolescent audiences (Patino,

Kaltcheva, & Smith, 2011) and feature risky content as well (Flynn et al., 2015). Also, we chose to assess risky behavior and demographics of characters in the overall shows that appeared on both lists, but the small number of characters (n=27) was not ideal for group comparisons. The small number of Black characters (n=69) also made it prohibitive to determine if Black characters in shows that were popular with different groups had different rates of involvement in risk behaviors (this seems to be the case for movies, see Ellithorpe et al., 2017). While the content analysis was comprehensive in coding for the presence or absence of character involvement in numerous behaviors, contextual information (e.g., character approval/disapproval) as well as the nature and explicitness of the conduct were not considered. However, despite these limitations, the present content analysis does help improve our knowledge about the kinds of risk behaviors adolescents are exposed to on television.

Conclusion

The demographic representation of characters portrayed on shows popular among Black and non-Black adolescents vary, but differences in the prevalence of risk portrayals are less consistent. Risk behaviors are frequently depicted by characters of all types and characters on overlap shows (i.e., popular with both groups) are riskier. Character age especially may be an important trait to consider for observational learning. These character features in television preferences have implications for understanding how exposure to risky content affects adolescents' risky health behaviors and related cognitions associated with such viewing.

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Bars not shown represent no cases (a zero value).

^a Overlap shows from both lists have a significantly higher proportion of characters involved in violent content than shows popular with non-Blacks at least at the $p < .05$ level.

^b Overlap shows from both lists have a significantly higher proportion of characters involved in the combinations of alcohol/violence, sex/violence, and alcohol/sex/violence compared to the non-Black and Black lists at least at the $p < .05$ level.

Figure 1.

Mean (proportions) of characters involved in risk behaviors by show popularity

Bars not shown represent no cases (a zero value).

^a Child genre shows have a significantly lower proportion of characters involved in sexual content compared to dramas and comedies at the $p < .05$ level.

Figure 2.

Mean (proportions) of characters involved in risk behaviors by program genre

Table 1.

Main Character (n=337) Demographics by Popularity Group

Show Popularity					
	Non-Black List n=174 %	Black List n=136 %	Both Lists n=27 %	Total n=337 %	Chi square, p value
Character Age	0–12 years	6.3 ^a	5.9 ^a	7.4 ^a	6.2
	13–20 years	10.9 ^a	41.9 ^b	14.8 ^a	23.7
	21–40 years	58.6 ^a	32.4 ^b	51.9 ^{a,b}	47.5
	41–65 years	24.1 ^a	19.9 ^a	25.9 ^a	22.6
Character Gender	Female	40.2	41.2	33.3	40.1
	Male	59.8	58.8	66.7	59.9
Character Race	White	72.5 ^a	63.1 ^{a,b}	44.4 ^b	66.4
	Black	13.8 ^a	24.6 ^a	51.9 ^b	21.3
	Hispanic	6.6 ^a	8.5 ^a	3.7 ^a	7.1
	Asian	7.2 ^a	3.1 ^a	0 ^a	4.9
	Other	0 ^a	0.8 ^a	0 ^a	0.3
Program Genre	Drama	51.7 ^a	19.9 ^b	55.6 ^a	39.2
	Comedy	48.3 ^a	27.9 ^b	44.4 ^{a,b}	39.8
	Child	0 ^a	52.2 ^b	0 ^a	21.1

Different subscripts in each *row* indicate differences between popularity group (list type) by each demographic.

Table. 2

Mean (Proportions) of Risk Behaviors by Character Demographics

	Alcohol M(SD)	Sex M(SD)	Violence M(SD)	Bullying* M(SD)	Alcohol/ Sex M(SD)	Alcohol/ Violence M(SD)	Sex/ Violence M(SD)	Alcohol/Sex/ Violence M(SD)
Overall	.38 (.487)	.38 (.486)	.54 (.499)	.17 (.376)	.10 (.306)	.05 (.225)	.07 (.247)	.01 (.109)
Character Age								
0–12 (n=21)	0	.05 (.218)^a	.43 (.507)	.24 (.436)	0	0	0	0
13–20 (n=80)	.10 (.302)^a	.31 (.466)^b	.59 (.495)	.15 (.359)	0	0	.08 (.265)	0
21–40 (n=160)	.52 (.501)^b	.48 (.501)^b	.56 (.498)	0	.16 (.370)	.08 (.264)	.06 (.243)	.03 (.157)
41–65 (n=76)	.50 (.503)^b	.34 (.478)^b	.50 (.503)	0	.12 (.325)	.08 (.271)	.08 (.271)	0
Character Gender								
Female (n=135)	.36 (.483)	.41 (.493)	.50 (.502)	.04 (.207)	.10 (.306)	.04 (.190)	.05 (.223)	.01 (.121)
Male (n=202)	.40 (.490)	.36 (.482)	.57 (.496)	.05 (.227)	.10 (.306)	.06 (.246)	.07 (.263)	.01 (.099)
Character Race								
White (n=215)	.39 (.488)	.42 (.495)	.51 (.501)	.04 (.190)	.11 (.316)	.05 (.221)	.06 (.239)	.01 (.096)
Black (n=69)	.43 (.499)	.32 (.469)	.64 (.484)	.06 (.235)	.12 (.323)	.09 (.288)	.10 (.304)	.03 (.169)
Hispanic (n=23)	.48 (.511)	.30 (.470)	.43 (.507)	.09 (.288)	.09 (.288)	0	0	0
Asian (n=16)	.19 (.403)	.38 (.500)	.50 (.516)	.06 (.250)	.06 (.250)	0	0	0

Different *column* superscripts indicate statistically significant differences in risk behavior proportion by indicated group.

* Bullying was only coded for child and adolescent characters. Totals are based on n=101.