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Risky movies, risky behaviors, and ethnic identity among Black adolescents

Amy Bleakley, PhD, MPH^a, Morgan E. Ellithorpe, PhD^b, Michael Hennessy, PhD, MPH^a, Patrick Jamieson, PhD^c, Atika Khurana, PhD^d, and Ilana Weitz, MPA^c

^aAnnenberg School for Communication, University of Pennsylvania, Philadelphia, PA 19104, USA

^bDepartment of Advertising & Public Relations, College of Communication Arts & Sciences, Michigan State University, East Lansing, MI 48823, USA

^cAnnenberg Public Policy Center, University of Pennsylvania, Philadelphia, PA 19104

^dDepartment of Counseling Psychology and Human Services, 5251 University of Oregon, Eugene, OR, 97403-5251

Abstract

Purpose—To investigate how exposure to sex, alcohol and violent content in mainstream and Black-oriented movies relates to corresponding adolescent behavior among Black youth from the United States and whether those relationships are moderated by ethnic identity.

Methods—The present study uses survey data from an online sample of 1,000 Black adolescents and content analysis ratings on top-grossing 2014 films and 2013/2014 Black-oriented films. Content-specific exposure measures for alcohol, sexual activity, and violence were calculated from self-reported exposure data and content analysis ratings. Regression analyses estimated the associations among exposures to risky health content in mainstream and Black-oriented films and adolescent behaviors as well as moderation by ethnic group identity.

Results—Black adolescents were mostly unaffected by exposure to risk portrayals in mainstream films, but exposure to risk in Black-oriented films was related to their behavior in all three domains. Strong group identity strengthened the relationship between exposure to sex in Black-oriented and mainstream films depending on the sexual outcome.

Conclusion—The type of movie (i.e., mainstream or Black-oriented) through which Black adolescents are exposed to risky health portrayals is important for its influence on their behavior, and variations by ethnic identity were limited to sex content. Future research should identify the mechanisms through which risk content in Black-oriented films is associated with Black adolescents' risky behaviors to determine how media influence contributes to behavioral disparities among youth.

Keywords

media; risk behavior; sex; alcohol; violence; adolescents; ethnic identity

Black adolescents are more likely to be in a physical fight, to engage in sexual intercourse, initiate sex earlier, and have four or more sex partners (Kann, 2016) compared to their white and Hispanic counterparts. Studies have linked exposure to media content portraying alcohol use, sex, and violence with increased risky behavior among adolescents (Bushman & Huesmann, 2006; Hanewinkel et al., 2014; Hennessy, Bleakley, Fishbein, & Jordan, 2009; O'Hara, Gibbons, Gerrard, Li, & Sargent, 2012; Strasburger, Jordan, & Donnerstein, 2010). However, media exposure to risk is differentially influential on behavior: the relationship between media exposure and behavior tends to be stronger among white adolescents compared to Black adolescents as has been found in studies on smoking initiation (Dal Cin, Stoolmiller, & Sargent, 2013), sexual behavior (Hennessy et al., 2009), and alcohol use (Gibbons et al., 2010). These differences persist despite the fact that Black youth spend almost twice as much time watching media than their white counterparts (Jordan et al., 2010; Rideout, 2015).

Why are Black adolescents apparently less influenced by media depictions of risky behaviors? One explanation is that media effects studies focus almost exclusively on mainstream content and fail to account for Black-oriented media (Dal Cin et al., 2013; Ellithorpe & Bleakley, 2016). Black-oriented media is programming where a majority of the characters are Black, the narratives revolve around racial themes, and/or is targeted toward Black audiences (Dal Cin et al., 2013; Schooler, Ward, Merriwether, & Caruthers, 2004; Sheridan, 2006). Black youth watch mainstream media content, but also seek out programming that features more racial diversity (Ellithorpe & Bleakley, 2016). Previous research on tobacco use suggests that Black adolescents are influenced by exposure to tobacco use in Black-oriented media but not in mainstream media (Dal Cin et al., 2013). It is important to examine how different sources of content may be related to risky behavior, and whether differential effects contribute to adolescents' behavioral health disparities.

We examine the association between exposure to sex, alcohol, and violent content in mainstream and Black-oriented movies with corresponding behaviors among Black adolescents from the United States. Social cognitive theory (SCT) assumes that media exposure is translated into behavior when the role model is similar and attractive to the viewer, the portrayals are realistic, and the behavior is positively reinforced (Bandura, 2001). It suggests that adolescents watching media characters perform risk behaviors have an increased probability of behavioral imitation, especially if they can relate to the characters and are lacking their own life experiences (Bandura, Bryan, & Zillman, 1994). Thus, media which features predominantly Black characters may be more likely to influence Black adolescents if they identify with characters in Black-oriented films. Previous research has suggested that Black audiences have stronger reactions to Black models (Abrams & Giles, 2007; Appiah, 2001, 2002) and that they watch media with more racial diversity (Ellithorpe & Bleakley, 2016). Incorporating Black-oriented media into such studies may reveal a stronger exposure-behavior relationship for Black youth (Dal Cin et al., 2013) than studies on sexual media effects have typically shown.

A content analysis of the films included in this sample reveals that Black characters were more likely to engage in sex and alcohol, compared to white characters who were more likely to be involved in violence (Ellithorpe et al., 2017). Black characters were also more

likely to portray multiple risk behaviors, with sex and alcohol being the most common combination. In the mainstream films, only 5.1% of characters were Black (75.3% were white, and 19.6% other) compared to 75.4% Black characters in Black-oriented films (20.9% white and 3.7% others) (see Ellithorpe et al., 2017). The underrepresentation of Black characters in popular media was also found in a comprehensive report of diversity in popular movies and television series, which concluded “the landscape of media content is still largely whitewashed”(Smith, Choueiti, & Pieper, 2016). Black characters in mainstream media have historically been relegated to minor or sidekick roles, with a lack of depth among characters and unflattering stereotypical depictions (Tukachinsky, Mastro, & Yarchi, 2015; Ward, 2004), and Black youth often feel that popular media images of Blacks are negative, inaccurate, and offensive (Adams-Bass, Bentley-Edwards, & Stevenson, 2014; Ward, 2004; Ward, Hansbrough, & Walker, 2005). A nationally representative survey of Black adolescents and young adults reported that respondents indicated “TV shows and movies they watch either portray them as unfaithful, promiscuous, or more likely to fail in life and relationships- or don't portray them at all” (National Campaign to Prevent Teen and Unplanned Pregnancy, 2011).

In contrast, Black-oriented media offers audiences an opportunity to observe Black characters in a range of roles in narratives that may more closely reflect Black experiences. Additionally, Black audiences are more likely to trust the portrayal of Black characters in such content (Jones, 1990). If youth are more likely model behavior when the models are similar and attractive, we would therefore expect exposure to risk content in Black-oriented movies should be more strongly related to behavior than exposure to risk from mainstream films.

Audience characteristics may be a moderating factor in that the exposure-behavior relationship may vary by the strength of adolescents' ethnic identity. Ethnic identity is one's knowledge and attachment to their racial group (Phinney, 1992) and is particularly relevant for youth. Developmentally, identity formation is a central task of adolescence (Erikson, 1994), but the importance of identity to an individual may be situational. Differences in the saliency of racial identity to the audience may affect how the audience responds to what is seen onscreen (Gandy Jr, 2001). Because evidence that suggests Black audience members report greater identification and liking for Black characters than for White characters (Appiah, 2001, 2002), we might expect that the stronger one's racial identity, the stronger the relationship between Black-oriented content and related behaviors. In contrast, a strong ethnic identity may be protective against mainstream content so that stronger identity would be associated with a weaker relationship between mainstream film content and related behavior. This pattern has been observed in relation to rap music videos and Black women's body image (Zhang, Dixon, & Conrad, 2009), but has not been explored in the context of risky health content in mainstream and Black-oriented films.

Our study hypotheses are: (H1) Reported exposure to sex, violence, and alcohol content in Black-oriented movies will be more strongly associated with Black adolescents' reported sexual activity, aggression, and alcohol use, respectively, than similar exposure in mainstream movies; and (H2) Ethnic identity will moderate the relationship between exposure to sex, violence, and alcohol content and corresponding behaviors in that stronger

identity will strengthen the relationship between Black-oriented exposure and behavior, and stronger identity will weaken the relationship between mainstream exposure and behavior.

Methods

Participants were 1,000 Black adolescents aged 14-17 years recruited from online opt-in panels through the survey company GfK between November 13 and December 14, 2015. Most respondents were recruited through their parents; the remaining were recruited directly. This sample are the Black youth from a sample of 2,424 adolescents surveyed as part of a larger study. Respondent ages were: 14 years (20.8%), 15 years (25.8%), 16 years (27.4%), and 17 years (26.0%). Study protocols were approved by the Institutional Review Board at the University of Pennsylvania.

Exposure to media content was calculated for sex, violence, and alcohol using content analysis of movies and participants' exposure to film titles.

Film sample

The top 30-grossing films of 2014 according to *Variety* magazine were selected as representing popular mainstream films. Black-oriented films were defined as those in which Black actors comprised half or more of the main characters and/or the movie had a Black-oriented narrative (Allen, Dawson, & Brown, 1989; Schooler, 2008; Schooler et al., 2004; Sheridan, 2006). Of the top 500 films for 2013 and 2014 (1,000 total) according to www.boxofficemojo.com, 33 films were selected as Black-oriented. The final sample included 29 mainstream films and 34 Black-oriented films (one film originally coded with mainstream films (*Ride Along*) met the criterion for a predominately Black cast). Exposure to sexual content was calculated only for R-rated films ($n=7$ mainstream; $n=16$ Black-oriented) because most explicit sex content is found in R-rated films; the MPAA rating system is less effective in restricting violent and alcohol content, which appear equally in PG-13 and R-rated films (Bleakley, Romer, & Jamieson, 2014; Nalkur, Jamieson, & Romer, 2010).

Content Coding Procedures

The films were coded by trained coders in five-minute segments ($n=1,510$) using a directed, quantitative, previously-validated coding scheme (Bleakley, Jamieson, & Romer, 2012; Bleakley et al., 2014; Jamieson & Romer, 2008; Nalkur et al., 2010). After multiple training sessions, the coders achieved inter-coder reliability for identifying the presence of each behavior as calculated by Krippendorff's alpha using a separately validated test sample of 59 segments. Each segment was coded for the portrayal of alcohol, sex, and/or violence. Sexual behavior was defined as any type of sexual contact, from kissing on the lips to explicit intercourse ($\alpha=0.93$). Violence was defined as initiated or received intentional acts to inflict injury or harm ($\alpha=0.94$). Alcohol portrayal was defined as a character being directly involved any activity related to alcohol, ranging from handling of alcohol bottles to observed consumption ($\alpha=0.94$).

Exposure to risk behaviors was operationalized by multiplying the proportion of segments for each film containing the risk behavior by each participant's self-reported exposure to the

film (indicated on the survey for whether they had seen each film: never (0), once (1), or more than once (2)). Using a previously tested approach (Bleakley, Fishbein, et al., 2008; Bleakley, Hennessy, Fishbein, & Jordan, 2008, 2011; Hennessy et al., 2009), these scores were summed across all films to create a measure of exposure to each risk in mainstream films and in Black-oriented films. The measures were then standardized.

Measures of sexual activity, aggression, and alcohol use were included on the survey. *Sexual activity* was measured using an ordered index of activity in the past 6 months created from the following dichotomous items: kissed, touch each other over clothes, touch breasts/had breasts touched, touched a partner's private parts, see a partner naked, be naked with partner, received oral sex, had vaginal sex, and given oral sex (Hennessy, Bleakley, Fishbein, & Jordan, 2008). The Loevinger's H coefficient was 0.89 (Van Schuur, 2003) and the KR-20 for the index was 0.94 ($M=2.16$ $SD=3.05$). We also used a dichotomous measure of whether or not the respondents reported having vaginal sex in the past 6 months (20.0%).

Aggression was measured using a 6-item aggression scale (Fikkers, Piotrowski, Weeda, Vossen, & Valkenburg, 2013). Respondents were asked how often they engaged in each of these behaviors (call names, push in a rough way, kick or hit, threaten to beat up, fought with, and tripped on purpose) in the past 6 months, on a scale from never (1), to about every day (6): The items were averaged to create an aggression scale (Cronbach's $\alpha=0.88$; $M=1.75$ $SD=1.02$).

In addition to the aggression measures, we also asked more specifically about being in a *physical fight*. Response categories for the number times the respondent was in a *physical fight* in the past 6 months (Centers for Disease Control and Prevention, 2015) ranged from 0 times (1) to 12 or more times (8); ($M=1.57$ $SD=1.21$). The distribution was skewed in that 71.3% of respondents indicated 0 times in the past 6 months. For the purposes of analysis, we dichotomized the fighting variable: zero times or at least once in the past 6 months.

Alcohol use was assessed by two measures: drinking frequency and binge drinking. The alcohol use item asked about the number of times the respondent had at least one drink of alcohol in the past 6 months, whereas binge drinking was measured by how often s/he had 5 or more drinks of alcohol (4 for females) within a couple of hours (Centers for Disease Control and Prevention, 2015). Responses for both measures were never (0) to about every day (5) (Alcohol use $M=0.47$ $SD=.95$; Binge drinking: $M=0.50$ $SD=1.08$).

Group identity is a measure of the strength of ethnic identity that was assessed with the item "inclusion of the in-group in the self" (Tropp & Wright, 2001). This item involves seven pairs of overlapping circles, with one representing the individual and one representing the target group (i.e., racial group). On a scale from 1 to 7, the pairs of circles begin completely separate from one another at point one, and gradually overlap more and more until they are nearly overlaid at point seven. In this analysis, we created a trichotomy: low identity (value 1), medium identity (values 2 to 6), and high identity (value 7). About 30% of the sample reported having "high" identity.

In addition to age and sex, the following covariates were included in the models because of their relationship to media exposure and/or risky health behaviors. *Sensation-seeking* was

measured using the four-item brief sensation seeking scale, response range 1 to 5, $M=3.26$, $SD=1.00$, Cronbach's $\alpha = .87$ (Stephenson, Hoyle, Palmgreen, & Slater, 2003). We calculated *daily TV time* by asking participants how many hours they spent watching television in three time periods the previous day: before noon, between noon and 6pm, and after 6pm. In order to limit to a maximum of 24 hours, responses greater than six hours for the time period between noon and 6pm ($n=41$, 2.09%) were recoded as 6 hours, and responses greater than nine hours were recoded as nine for the other two time periods (before noon $n=28$, 1.42%; after 6pm $n=15$, 0.08%). Responses were then summed ($M=6.23$, $SD=4.96$; $Median=5.0$). *Perceived parental monitoring*, or the extent to which an adolescent believes his or her parents knows about their whereabouts/activities, was measured by eight items (range from never (1) to always (5), Cronbach's $\alpha = 0.92$, $M=3.59$ $SD=1.02$) (Stattin & Kerr, 2000). And finally, *perceived parental involvement* was assessed using 3 items that indicated how often “my parents or the adults who take care of me spend time just talking with me”, “my family does something fun together,”, and you eat dinner with your parents.” These perceived parental involvement measures were on a scale from (1) “Never” to (4) “Almost everyday” and were averaged into one measure (Polychoric $\alpha = 0.84$, $M=2.80$ $SD=0.85$).

Statistical Analysis

Descriptive analyses were conducted using t-tests or Chi-square as appropriate. Linear regression models were used to analyze the association between each behavior (sexual activity, aggression, alcohol in past 6 months, and binge drinking in the past 6 months) and corresponding content exposure. Logistic regression was used for the dichotomous vaginal sex and physical fighting outcomes. All exposure measures were standardized using z-scores. Each behavioral outcome was regressed on exposure to content (either sex, violent, or alcohol) in mainstream films and exposure content (either sex, violent, or alcohol) in Black-oriented films in addition to the covariates. Unstandardized regression coefficients and odds ratios are reported. In the regression analyses, nine observations out of 1000 were treated missing (<0.1%). We assumed the observations were missing at random and therefore no imputation strategies were used.

Results

Table 1 provides statistics for the outcome variables and covariates. The distributions of mainstream vs. Black-oriented film exposure are shown in Figure 1. The histograms demonstrate that Black adolescents are exposed to higher levels of risk content in mainstream movies compared to risk in Black-oriented films.

Regression Analyses

Regression results for all the models are presented in Table 2. Because most explicit sexual content is in R-rated movies, we only examined exposure to sexual content in R-rated films. The linear regression model showed that exposure to sexual content in both mainstream and Black-oriented movies was associated with increased sexual activity. However, only exposure to sex in Black-oriented films was significantly associated with vaginal sex. Exposure to Black-oriented films was positively associated with aggressive behavior and the odds of being in a physical fight among Black adolescents. Only exposure to alcohol content

in Black-oriented movies was significantly associated with both drinking in the past 6 month and binge drinking.

Group/ethnic identity moderation

To test whether group identity moderated the association of mainstream movie content exposure and Black-oriented movie content exposure with the behavioral outcomes, we entered (separately) interaction terms of identity and mainstream exposure and identity and Black-oriented exposure into each regression model. There were significant interactions between group identity with both mainstream sex exposure and Black-oriented sex exposure on sexual activity and Black-oriented sex exposure on vaginal intercourse (see Figure 2). In general, as the figures show, mainstream sex exposure in the low identity group was negatively associated with sexual activity, while exposure in the medium and high identities groups were positively associated with the sexual outcomes. For sexual activity, the Black-oriented sex exposure slope for high identity teens was not statistically different from low identity ($b=0.38$ (.24), $p=.116$), unlike the slope for medium identity teens ($b=0.78$ (.21), $p<.01$); the mainstream sex exposure slopes for both medium ($b=0.61$ (.23), $p<.01$) and high ($b=0.55$ (.26), $p<.05$) identity were significantly different from low identity, but not from one another ($F(1,973)=0.08$, $p=.78$). For vaginal sex, the Black-oriented sex exposure odds ratio for medium identity teens was statistically significant ($OR=1.75$; 1.13, 2.71, $p<.05$), but the odds for high identity teens were not statistically different from low identity ($OR=1.33$; .83, 2.11, $p=.231$). However, the odds of the medium and high identity teens were not statistically different from one another ($\chi^2(1)1.86$, $p=.17$). The identity by exposure interactions were not significant for any of the aggressive or drinking behaviors.

Discussion

Adolescents watch movies more than any other age group (Nielson, 2009). Exposure to risk in media affects adolescents' behavior (Strasburger et al., 2010), but exposure to risk content does not affect all youth in the same way. In particular, Black adolescents watch more and different television/movie content than other adolescents (Ellithorpe & Bleakley, 2016), and previous research suggests effects of the media on their behavior vary by whether it is mainstream or Black-oriented (Dal Cin et al., 2013). The present study expands on this work and found a similar pattern of effects for sex, alcohol, and violence content. For violent and alcohol content, exposure to risk in Black-oriented movies was associated with all the corresponding behavioral indicators among our sample of Black adolescents. There was no association of exposure to risk content in mainstream films except for sexual content exposure and sexual activity. Similar to violent and alcohol content, vaginal sex was only associated with sex content exposure in Black-oriented movies. Furthermore, adolescents' group identity moderates the exposure behavior relationship for sexual behavior outcomes, but not aggressive or alcohol behaviors.

It is possible (and is consistent with SCT) that Black-oriented content is more influential for Black youth because it features racially similar models. Adolescents, in particular, make up a large subset of the media audience and are experiencing identity processes that may impact the way they perceive and respond to Black-oriented media (Ellithorpe & Bleakley, 2016;

Jordan et al., 2010; Phinney, 1989). There is evidence that a character's race can impact the way that Black audience members identify with and evaluate that character, with Blacks reporting higher identification and liking with Black characters than for white characters (Appiah, 2001, 2002). However, it is possible that another feature of Black-oriented media other than character race is what resonates with Black adolescents, such as the plot or themes. Given that the majority of Black-oriented movies have exclusively African-American casts, however, it is likely that character race is a contributing factor in the exposure-behavior association.

Although the findings for Black-oriented media supported our predictions for exposure to violent content and to alcohol content, this pattern varied for sex content exposure. Exposure to sex in R-rated movies regardless of movie type (mainstream or Black-oriented) was associated with sexual activity, however only exposure to sex in Black-oriented films was related to vaginal sex. Unlike the other outcome variables, sexual activity is not necessarily problematic or “risky” for adolescents, and in some circumstances would be considered part of healthy development. And it is not clear why group identity moderates the –exposure-behavior relationship for sexual behaviors but no other risk behaviors. Black youth report feeling pressure from the media to have sex; perhaps those with stronger ethnic identity internalize this pressure from watching Black characters involved in sexual content (National Campaign to Prevent Teen and Unplanned Pregnancy, 2011). These findings together suggest that media influence with regard to sexual content may play a greater role in developmental tasks and processes for adolescents than other types of risk content.

Adolescents' more likely to see themselves in aspects of the characters in Black-oriented movies may especially be more affected by the characters' risk portrayals. The interaction of identity and mainstream sex exposure was not protective for high identity adolescents as hypothesized. The relationship was stronger for medium and high identity youth compared to low identity youth, in which there was a flat or negative association between mainstream exposure and behavior. Black youth typically have high ethnic identity which is associated with greater social-psychological well-being (Martinez & Dukes, 1997). The low identity Black adolescents in our sample may be atypical in ways that are related to how exposure to sex content affects sexual behavior (e.g., through perception of peer norms, see Bleakley et al., 2011). The stronger exposure-behavior relationship for Black-oriented media is consistent with a diversity of roles for Black characters in these types of movies, which increases the likelihood that teens may relate to the characters on the basis of race or other social or emotional characteristics.

For health practitioners and parents, these findings validate current AAP recommendations for clinicians to work with families to develop family media plans and for parents to make appropriate choices regarding content (Hill et al., 2016). Parental monitoring was protective for 5 out of 6 risk behaviors, which lends support to the notion that parents' knowledge about their adolescents' lives, including the media content to which they are exposed, may result in lower involvement in potentially risky behaviors. Knowing which risk content is more impactful for Black adolescents, coupled with knowledge about existing differences in domain-specific behavior, can inform such decision-making around media with the goal of minimizing exposure to and influence of risky content. Additionally, by recognizing what

types of media (i.e., Black-oriented) are consistently influential across a variety of risk behavior outcomes, we deepen our understanding of how Black adolescent audiences respond to media and how it relates to their behavior. Future research should further investigate the mechanisms through which their risk exposure affects risk behavior, and more analyses on how ethnic identity affects their identification and perceptions of similarity with movie characters.

Limitations

Although these findings are consistent with longitudinal research that demonstrates time-ordered causal effects of media exposure on adolescent risk behavior (Wright, 2011), our data are cross-sectional and causal direction cannot be confirmed. For instance, research has also shown that adolescents who have sex may seek sexual content in their media to validate their behavioral choices (Bleakley, Hennessy, et al., 2008). Our exposure measures are based on the presence a particular type of risky content and do not account for the explicitness of such content or the context in which it was shown. We would expect, however, that the relationship between exposure and behavior would be even stronger for more explicit content or content which was portrayed with approval from other characters and/or from the adolescents' peer group. It is possible that we underestimated the association between exposure and sexual outcomes by not including exposure to less explicit sexual content found in PG-13 movies. From a risk perspective, however, modeling more explicit sexual behaviors in R-rated movies is more problematic. Finally, we do not include potential mediating factors such as perceptions of peer behaviors/peer norms (e.g., Mahalik, Lombardi, Sims, Coley, & Lynch, 2015) and/or measures of character identification and perceived similarity that could identify one mechanism through which exposure to risk content affects Black adolescents' risk behaviors.

Conclusion

The type of movie (i.e., mainstream or Black-oriented) through which Black adolescents are exposed to portrayals of risky health behaviors matters for its influence on their behavior. Ethnic identity is a moderating factor for sexual behaviors, but not aggressive or drinking behaviors. Future research should identify and elaborate the mechanism through which risk content in Black-oriented media is associated with risky behaviors among Black adolescents to determine how media influence contribute to on behavioral disparities among youth.

References

- Abrams JR, Giles H. Ethnic identity gratifications selection and avoidance by African Americans: A group vitality and social identity gratifications perspective. *Media Psychology*. 2007; 9(1):115–134. doi:<http://dx.doi.org/10.1080/15213260709336805>.
- Adams-Bass VN, Bentley-Edwards KL, Stevenson HC. That's Not Me I See on TV...: African American Youth Interpret Media Images of Black Females. *Women, Gender, and Families of Color*. 2014; 2(1):79–100.
- Allen RL, Dawson MC, Brown RE. A schema-based approach to modeling an African-American racial belief system. *American Political Science Review*. 1989; 83:421–441. doi:<http://dx.doi.org/10.2307/1962398>.

- Appiah O. Black, White, Hispanic, and Asian American adolescents' responses to culturally embedded ads. *Howard Journal of Communication*. 2001; 12(1):29–48. doi:<http://dx.doi.org/10.1080/10646170117577>.
- Appiah O. Black and White viewers' perception and recall of occupational characters on television. *Journal of Communication*. 2002; 52(4):776–793. DOI: 10.1111/j.1460-2466.2002.tb02573.x
- Bandura A. Social cognitive theory of mass communication. *Media Psychology*. 2001; 3:265–299. DOI: 10.1207/S1532785XMEP0303_03
- Bandura, A., Bryan, J., Zillman, D. Social cognitive theory of mass communication. In: Bryant, J., Zillman, D., editors. *Media effects: Advances in theory and research*. Hillsdale, NJ: Earlbaum; 1994.
- Bleakley A, Fishbein M, Hennessy M, Jordan A, Chernin A, Stevens R. Developing respondent based multi-media measures of exposure to sexual content. *Communications Methods and Measures*. 2008; 2(1 & 2):43–64.
- Bleakley A, Hennessy M, Fishbein M, Jordan A. It works both ways: the relationship between exposure to sexual content in the media and adolescent sexual behavior. *Media Psychology*. 2008; 11(4):443–461. [PubMed: 20376301]
- Bleakley A, Hennessy M, Fishbein M, Jordan A. Using the Integrative Model to explain how exposure to sexual media content influences adolescent sexual behavior. *Health Education and Behavior*. 2011; 38(5):530–540. [PubMed: 21606378]
- Bleakley A, Jamieson PE, Romer D. Trends of sexual and violent content by gender in top-grossing US films, 1950-2006. *Journal of Adolescent Health*. 2012
- Bleakley A, Romer D, Jamieson PE. Violent film characters' portrayal of alcohol, sex, and tobacco-related behaviors. *Pediatrics*. 2014; 133(1):71–77. [PubMed: 24323997]
- Bushman BJ, Huesmann LR. Short-term and long-term effects of violent media on aggression in children and adults. *Archives of Pediatrics & Adolescent Medicine*. 2006; 160(4):348. [PubMed: 16585478]
- Centers for Disease Control and Prevention. 1991-2015 High School Youth Risk Behavior Survey Data. 2015. Retrieved from <http://nccd.cdc.gov/youthonline/>
- Dal Cin S, Stoolmiller M, Sargent JD. Exposure to smoking in movies and smoking initiation among Black youth. *American Journal of Preventive Medicine*. 2013; 44(4):345–350. doi:<http://dx.doi.org/10.1016/j.amepre.2012.12.008>. [PubMed: 23498099]
- Ellithorpe ME, Bleakley A. Wanting to see people like me? Racial and gender diversity in popular adolescent television. *Journal of Youth and Adolescence*, online first. 2016; doi: 10.1007/s10964-016-0415-4
- Ellithorpe ME, Bleakley A, Hennessy M, Weitz I, Jamieson P, Khurana A. Differences in the portrayal of health risk behaviors by black and white characters in popular films. *Journal of health communication*. 2017:1–8.
- Erikson, EH. *Identity: Youth and crisis*. WW Norton & Company; 1994.
- Fikkers KM, Piotrowski JT, Weeda WD, Vossen HG, Valkenburg PM. Double dose: High family conflict enhances the effect of media violence exposure on adolescents' aggression. *Societies*. 2013; 3(3):280–292.
- Gandy OH Jr. Racial identity, media use, and the social construction of risk among African Americans. *Journal of Black Studies*. 2001; 31(5):600–618.
- Gibbons F, Pomery E, Gerrard M, Sargent J, Weng CY, Wills T, et al. Stoolmiller M. Media as social influence: racial differences in the effects of peers and media on adolescent alcohol cognitions and consumption. *Psychology of addictive behaviors*. 2010; 24(4):649. [PubMed: 21198226]
- Hanewinkel R, Sargent JD, Hunt K, Sweeting H, Engels RC, Scholte RH, et al. Morgenstern M. Portrayal of alcohol consumption in movies and drinking initiation in low-risk adolescents. *Pediatrics*. 2014; 133(6):973–982. DOI: 10.1542/peds.2013-3880 [PubMed: 24799536]
- Hennessy M, Bleakley A, Fishbein M, Jordan A. Validating an adolescent sexual behavior index using psychosocial theory and social trait correlates. *AIDS and Behavior*. 2008; 8:321–331.
- Hennessy M, Bleakley A, Fishbein M, Jordan A. Estimating the longitudinal association between adolescent sexual behavior and exposure to sexual media content. *Journal of Sex Research*. 2009; 46:586–596. [PubMed: 19382030]

- Hill D, Ameenuddin N, Chassiakos YR, Cross C, Radesky J, Hutchinson J, et al. Swanson WS. Media use in school-aged children and adolescents. *Pediatrics*. 2016; doi: 10.1542/peds.2016-2592
- Jamieson, P., Romer, D. The changing portrayal of adolescents in the media since 1950. New York, NY, USA: Oxford University Press; 2008.
- Jones FG. The Black audience and the BET channel. *Journal of Broadcasting & Electronic Media*. 1990; 34(4):477–486.
- Jordan A, Bleakley A, Manganello J, Hennessy M, Stevens R, Fishbein M. The role of television access in the viewing time of US adolescents. *Journal of Children and Media*. 2010; 4(4):355–370. DOI: 10.1080/17482798.2010.510004
- Kann L. Youth risk behavior surveillance—United States, 2015. *MMWR Surveillance Summaries*. 2016; 65(No.SS-6):1–174.
- Mahalik JR, Lombardi CM, Sims J, Coley RL, Lynch AD. Gender, male-typicality, and social norms predicting adolescent alcohol intoxication and marijuana use. *Social Science & Medicine*. 2015; 143:71–80. [PubMed: 26344125]
- Martinez RO, Dukes RL. The Effects of Ethnic Identity, Ethnicity, and Gender on Adolescent Well-Being. *Journal of Youth and Adolescence*. 1997; 26(5):503–516. DOI: 10.1023/a:1024525821078
- Nalkur PG, Jamieson PE, Romer D. The effectiveness of the Motion Picture Association of America's rating system in screening explicit violence and sex in top-ranked movies from 1950 to 2006. *Journal of Adolescent Health*. 2010; 47(5):440–447. [PubMed: 20970078]
- National Campaign to Prevent Teen and Unplanned Pregnancy. Under Pressure: What African-American Teens Aren't Telling You About Sex, Love, and Relationship. 2011. Retrieved from <https://thenationalcampaign.org/sites/default/files/resource-primary-download/under-pressure.pdf>
- Nielsen. How teens use media: A Nielsen report on the myths and realities of teen media trends. 2009. Retrieved from http://blog.nielsen.com/nielsenwire/reports/nielsen_howteensusemedia_june09.pdf
- O'Hara RE, Gibbons FX, Gerrard M, Li Z, Sargent JD. Greater exposure to sexual content in popular movies predicts earlier sexual debut and increased sexual risk taking. *Psychological science*. 2012; 23(9):984–993. [PubMed: 22810165]
- Phinney JS. Stages of ethnic identity development in minority group adolescents. *The Journal of Early Adolescence*. 1989; 9(1-2):34–49. DOI: 10.1177/0272431689091004
- Phinney JS. The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*. 1992; 7(2):156–176.
- Rideout V. The common sense census: Media use by tweens and teens. 2015
- Schooler D. Real women have curves: A longitudinal investigation of TV and the body image development of Latina adolescents. *Journal of Adolescent Research*. 2008; 23(2):132–153. DOI: 10.1177/0743558407310712
- Schooler D, Ward ML, Merriwether A, Caruthers A. Who's that girl: Television's role in the body image development of young white and black women. *Psychology of Women Quarterly*. 2004; 28(1):38–47. DOI: 10.1111/j.1471-6402.2004.00121.x
- Sheridan E. Conservative implications of the irrelevance of racism in contemporary African American cinema. *Journal of Black Studies*. 2006; 37(2):177–192. DOI: 10.1177/0021934706292347
- Smith, SL., Choueiti, M., Pieper, K. INCLUSION or INVISIBILITY? Comprehensive Annenberg Report on Diversity in Entertainment. 2016. Retrieved from <http://annenberg.usc.edu/pages/~media/MDSCI/CARDReport%20FINAL%2022216.ashx>
- Stattin H, Kerr M. Parental monitoring: A reinterpretation. *Child development*. 2000; 71(4):1072–1085. [PubMed: 11016567]
- Stephenson MT, Hoyle RH, Palmgreen P, Slater MD. Brief measures of sensation seeking for screening and large-scale surveys. *Drug and alcohol dependence*. 2003; 72(3):279–286. DOI: 10.1016/j.drugalcdep.2003.08.003 [PubMed: 14643945]
- Strasburger VC, Jordan AB, Donnerstein E. Health effects of media on children and adolescents. *Pediatrics*. 2010; 125(4):756–767. DOI: 10.1542/peds.2009-2563 [PubMed: 20194281]
- Tropp LR, Wright SC. Ingroup identification as the inclusion of ingroup in the self. *Personality and Social Psychology Bulletin*. 2001; 27(5):585–600. DOI: 10.1177/0146167201275007

- Tukachinsky R, Mastro D, Yarchi M. Documenting Portrayals of Race/Ethnicity on Primetime Television over a 20-Year Span and Their Association with National-Level Racial/Ethnic Attitudes. *Journal of Social Issues*. 2015; 71(1):17–38.
- Van Schuur WH. Mokken scale analysis: between the Guttman scale and parametric item response theory. *Political Analysis*. 2003; 11(2):139–163. DOI: 10.1093/pan/mpg002
- Ward LM. Wading through the stereotypes: positive and negative associations between media use and black adolescents' conceptions of self. *Developmental Psychology*. 2004; 40(2):284. [PubMed: 14979767]
- Ward LM, Hansbrough E, Walker E. Contributions of music video exposure to black adolescents' gender and sexual schemas. *Journal of Adolescent Research*. 2005; 20(2):143–166.
- Wright PJ. Mass media effects on youth sexual behavior assessing the claim for causality. *Annals of the International Communication Association*. 2011; 35(1):343–385.
- Zhang Y, Dixon TL, Conrad K. Rap music videos and African American women's body image: The moderating role of ethnic identity. *Journal of Communication*. 2009; 59(2):262–278.

Figure 1. Distribution of exposure to risk content in mainstream and Black-oriented movies

Figure 2. Interaction plots of group identity with exposure to sex content

Table 1
Sample descriptives for main variables and covariates ($n=1,000$)

Risk behaviors	Mean (SD) or %
<i>Sexual behaviors</i>	
Sexual activity (0-9)	2.16 (3.05)
Vaginal sex	20.0%
<i>Aggressive behaviors</i>	
Aggression (1-6)	1.75 (1.02)
Physical fighting at least 1 time in past 6 months (1-8)	1.57 (1.21)
0 times	71.3%
1 time	14.9%
2 or 3 times	8.1%
4 or more times	8.1%
<i>Alcohol behaviors</i>	
Frequency of alcohol use in past 6 months (0-5)	0.47 (.94)
Never	74.3%
1 time	12.0%
2-3 times	9.1%
About 1 time per month	2.5%
About 1 time per month	1.4%
Everyday	0.7%
Frequency of binge drinking in the past 6 months (0-6)	0.50 (1.08)
Did not drink in the past 6 months	74.3%
Never	13.7%
1 time	5.1%
2-3 times	4.3%
About 1 time per month	0.9%
About 1 time per month	0.7%
Everyday	1.0%
Covariates	
Sensation seeking (1-5)	3.26 (1.00)
Daily television time (0-24)	6.24 (4.96)
Perceived parental monitoring (1-5)	3.59 (1.02)
Perceived parental involvement (1-4)	2.80 (.85)
Group identity	
Low identity	17.2%
Medium identity	53.2%
High identity	29.7%

Risk behaviors	<i>Mean (SD) or %</i>
Demographics	
Age (14-17 years)	15.6 (1.09)
Male	49.9%

Table 2

Results for regression models ($n=991$)

	Sexual behaviors		Aggressive behaviors		Alcohol behaviors	
	Sexual activity <i>b</i> (<i>SE</i>)	Vaginal sex <i>OR</i> [<i>CI</i>]	Aggression <i>b</i> (<i>SE</i>)	Physical fighting <i>OR</i> (<i>CI</i>)	Drinking <i>b</i> (<i>SE</i>)	Binge drinking <i>b</i> (<i>SE</i>)
Exposure variables [/]						
Mainstream movie exposure	0.28 (.13)	1.06 [0.82,1.38]	-0.03 (.04)	1.05 [0.88,1.28]	0.04 (.04)	0.05 (.04)
Black-oriented movie exposure	0.30 (.13)	1.39 [1.10, 1.77]	0.14 (.04)	1.43[1.19,1.73]	0.11 (.04)	0.17 (.04)
Covariates						
Sensation seeking (1-5)	0.25 (.09)	1.16 [.95,1.41]	0.18 (.03)	1.26 (1.08,1.46)	0.08 (.03)	0.07 (.03)
Daily television time (0-24)	0.007 (.02)	1.03 [.99,1.07]	0.01 (.01)	1.03 (1.0,1.06)	0.01 (.01)	0.01 (.01)
Perceived parental monitoring (1-5)	-0.45 (.12)	0.64 [.51,.82]	-0.07 (.04)	0.78 (.65,.94)	-0.14 (.04)	-0.18 (.04)
Perceived parental involvement (1-4)	0.22 (.14)	1.11 [.84,1.48]	-0.02 (.05)	1.09 (.88,1.37)	-0.01 (.04)	0.04 (.05)
Group identity (ref: low)						
Medium	-0.16 (.25)	0.72 [.43,1.21]	.01 (.09)	0.77 [.52,1.13]	-0.04 (.08)	-0.09 (.09)
High	0.11 (.28)	0.93 [.52,1.64]	-0.09 (.10)	0.73 [.48,1.13]	0.02 (.09)	-0.02 (.10)
Demographics						
Age (ref: 14 years)						
Age 15	0.55 (.27)	2.25 [1.67,3.71]	-0.18 (.09)	1.36 (.89,2.08)	0.18 (.09)	0.19 (.10)
Age 16	0.71 (.27)	2.18 [1.11,4.27]	-0.20 (.09)	0.99 (.64,1.53)	0.15 (.09)	0.08 (.09)
Age 17	1.39 (.27)	5.20 [2.71,9.98]	-0.26 (.09)	1.03 (.66,1.60)	0.36 (.09)	0.42 (.10)
Male	1.00 (.19)	2.48 [1.67,3.71]	0.15 (.06)	1.61 (1.20,2.17)	0.08 (.06)	0.15 (.07)

Note: Bold coefficients are significant at the $p<.05$ level or less.

[/]The specific content for the exposure variables matched the behavioral outcome (i.e., exposure to sex content for the sexual behaviors exposure to violent content for the aggressive behaviors, and exposure to alcohol content for the alcohol behaviors).