Published in final edited form as:
J Health Commun. 2009 December ; 14(8): 756–767. doi:10.1080/10810730903295567.

Tobacco, Alcohol, and Other Risk Behaviors in Film: How Well Do MPAA Ratings Distinguish Content?

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Abstract

To evaluate the usefulness of MPAA ratings for parental selection of appropriate films for children, the 100 top grossing movies each year from 1996 through 2004 (N=900) were content analyzed to measure risk behaviors in each film. More restrictive MPAA ratings (R and PG-13) were associated with increased mean seconds of portrayals of tobacco use, alcohol use, and sexual content; increased frequency of violent content; and increased salience of drug use. However, MPAA ratings did not clearly distinguish films based on tobacco or alcohol use. Fifty percent of R-rated movies contained 124 seconds or more of tobacco use, comparable to 26% of PG-13 and 17% of PG movies. Fifty percent of R-rated movies contained 162 seconds or more of alcohol use, comparable to 49% of PG-13 and 25% of PG movies. Because of the high degree of overlap in alcohol and tobacco content between rating categories, the MPAA rating system, as currently defined, is not adequate for parents who wish to limit their children's exposure to tobacco or alcohol content in movies.

Accumulating evidence suggests that adolescents' behavior is influenced by what they see in popular media, including movies. Years of research have supported an association between viewing violence in media and subsequent aggressive thoughts and behaviors (Bushman & Huessman, 2001; Paik & Comstock, 1994; Wood, Wong, & Chachere, 1991). Research has found that exposure to sexual content in media influences sexual attitudes, intentions, and behavior (American Academy of Pediatrics Committee on Public Education, 2001; Ashby, Arcari, & Edmonson, 2006; Brown et al., 2006; Collins et al., 2004; Martino, Collins, Kanouse, Elliott, & Berry, 2005). Initiation of other risk behaviors, such as smoking and drinking alcohol, has also been linked to exposure to media portrayals of these behaviors (Klein et al., 1993). Viewing smoking in movies is associated with adolescent initiation of smoking (Dalton et al., 2003; Hanewinkel & Sargent, 2007; Sargent et al., 2001; Sargent et al., 2005) and having a favorite star who smokes is also associated with trying smoking (Distefan, Gilpin, Sargent, & Pierce, 1999; Distefan, Pierce, & Gilpin, 2004; Tickle, Sargent, Dalton, Beach, & Heatherton, 2001). Similar effects have been reported for viewing alcohol content in movies on the initiation

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of alcohol use (Sargent, Wills, Stoolmiller, Gibson, & Gibbons, 2006). Additionally, prior experimental studies demonstrated that children who viewed drinking portrayals on television had more positive beliefs about alcohol than children who did not (Kotch, Coulter, & Lipsitz, 1986; Robinson, Chen, & Killen, 1998; Rychtarik, Fairbank, Allen, Foy, & Drabman, 1983).

In order to determine whether a child should see a particular movie, many parents in the United States rely on ratings determined by the Motion Picture Association of America (MPAA). Established in 1968, the MPAA rating system is the most widely available movie rating system in the U.S.; it is the only rating that currently appears on DVD/VHS covers, is listed in theaters when movies are released, and appears on all advertising materials for films. Although other rating systems are being developed and are available on the internet (e.g., http://www.screenit.com and http://www.kids-in-mind.com), the MPAA rating system continues to be the most accessible and visible rating system to parents making decisions about movie appropriateness. The MPAA uses a 5 category age-based rating system: G (appropriate for general audiences), PG (parental guidance is suggested, some content may not be appropriate for all children), PG-13 (parents are strongly cautioned, content may not be suitable for children under age 13), R (restricted to individuals 17 or over unless accompanied by a parent or guardian), and NC-17 (no one under age 18 is admitted) (Motion Picture Association of America [MPAA], 2005b).

Although MPAA ratings are supposed to offer a quick way for parents to determine the age appropriateness of movies, parents often judge movie content to be less appropriate for adolescents than the MPAA ratings would suggest (Walsh & Gentile, 2001) and over 40% of parents in a recent survey indicated that ratings did not provide enough information to assist them in making decisions about their children's movie viewing (Longacre et al., in press). To supplement the ratings, the MPAA ratings board also provides descriptive content codes (e.g., graphic violence, brief nudity, or strong language), which provide additional information about the reasons for the rating. The use of some content codes, particularly those related to sexuality and violence, do correlate with MPAA ratings. However, content codes related to substance use, including alcohol and tobacco use, often inadequately or inconsistently represent the content of the films (Thompson & Yokota, 2004). This probably reflects the fact that tobacco and alcohol are not currently among the content areas specifically considered by the MPAA ratings board when evaluating a movie. In a recent study, 61% of parents reported that they want to be informed about smoking and drinking in films (Longacre et al., in press). This suggests that the criterion currently used for MPAA ratings may not match parents' concerns. In addition, there is recent evidence of "ratings creep" (a decrease in the strictness of the ratings over time) suggesting that the MPAA ratings board may be giving more lenient ratings to objectionable content over the last decade (Thompson & Yokota, 2004). Gentile, Humphrey, and Walsh (2005) have advocated for additional research to examine the reliability and validity of rating systems over time as a step in moving toward a system that will better meet parents' needs.

The objectives of the present research are to quantify the risk behavior content in a large sample of popular contemporary films released over a nine-year period, examine differences in content between MPAA rating categories, and explore how well MPAA ratings distinguish risk behavior content. Sex, violence, and drug use are explicitly used by the MPAA ratings board to determine rating categories. As such, these behaviors are examined in this paper as context for the behaviors of primary interest: tobacco and alcohol use. In a content analysis of a smaller sample of movies we found the mean amount of tobacco use was positively correlated with MPAA rating (Dalton, Tickle, Sargent, Beach, Ahrens, & Heatherton, 2002). However, this association does not necessarily mean that the ratings adequately discriminate content if the distributions for each rating category substantially overlap. To our knowledge, the extent to which the current ratings distinguish tobacco and alcohol content for individual movies has

not been quantified. In response to pressure from public health advocates, the MPAA recently announced that it will consider tobacco as a criterion in the rating system (MPAA, 2007), but it is not clear how this will be implemented or what impact this consideration will have on a movie's rating. This analysis evaluates whether a revision to the current rating system is necessary to adequately inform parents about tobacco and alcohol content in movies. It also establishes an important baseline comparison for the evaluation of the MPAA's future policy change in the consideration of tobacco use. Secondarily, evidence of "ratings creep" over this time period is also explored to determine if frequency of risk behaviors within the rating categories became more prevalent over time.

Method

Procedure

The top 100 films ranked by box office gross in the United States for each year from 1996 through 2004 as recorded on http://www.worldwideboxoffice.com were included in the sample for content analysis ($N = 900$). This sample included 37 G rated films, 148 PG rated films, 363 PG-13 rated films, and 352 R rated films. Two research coders trained in content analysis procedures worked independently to code randomly assigned movies from each year's list. Approximately ten percent of films were coded by both coders independently in order to assess reliability. All variables reported in this paper exceeded 70 percent agreement for categorical variables or a .70 correlation for continuous variables. More detail on the content analysis procedures have been previously published (Dalton, Tickle, et al., 2002).

Variables

Tobacco use—Tobacco use was timed to measure the total number of seconds that tobacco was used or handled during the film. If multiple characters used or handled tobacco on screen simultaneously, the concurrent use was only timed once. The coding also included what type of tobacco product was being used (cigarette, cigar, pipe, smokeless tobacco), whether a tobacco brand appeared in the film (yes or no), whether there was adolescent use of tobacco in the film (yes or no), and whether there was a clear negative reaction to the smoking in the film (yes or no).

Alcohol use—Alcohol use was timed to measure the total number of seconds that alcohol appeared and there was real or implied consumption of the alcohol. As with tobacco use, coincident exposure to alcohol was only timed once. Coders indicated whether there was underage drinking in the film (yes or no), whether any characters appeared intoxicated (yes or no), and what specific types of alcohol were consumed (beer or malt beverages, wine or champagne, and liquor).

Sexual content—Sexual behavior was timed to measure the total number of seconds that sexual behavior, including kissing, petting, and intercourse, was shown on screen. Male and female nudity were coded as separate variables.

Drug use—The salience of drug use in the film was coded categorically (no drug use, drug use was not at all salient, minimally salient, moderately salient, extremely salient).[1] In addition, coders indicated which drugs were used during the film: marijuana, cocaine/crack, heroin/

[1]Unlike tobacco and alcohol content, drug use was not timed in seconds. The effects of the drugs portrayed in films typically last far longer than the actual ingestion or consumption (which is what was measured for tobacco and alcohol content), but it is difficult to determine when those effects end. Therefore, categorical coding was adopted to reflect the salience of drug use, rather than the amount of time drug use appeared on screen.

opiates, LSD/hallucinogens, inhalants, or club drugs. Coders also indicated whether there was drug use by teenagers (yes or no).

Violence—Violent content was defined to include action related violence (car crashes, explosions), horror related violence (slasher type scenes as would be expected in horror films), sadistic violence (involving torture or human suffering), and interpersonal violence (involving violence enacted by one person against another such as fist-fighting or hand-to-hand combat). The overall frequency of violence in the film was coded using an ordinal measure (no violence, minimal violence, moderate violence, or frequent violence) as well as the presence of particular categories of violence (gory depictions, horror related violence, sadistic violence, and interpersonal violence).[2]

Statistical Procedures

Multiple regression analysis with pairwise comparison of means using Tukey's WSD test (Tukey, 1953) was used to examine the primary hypotheses that seconds of tobacco use, alcohol use, and sexual behavior would increase across MPAA ratings. Violence frequency and drug salience were analyzed using negative binomial regression (Cameron & Trivedi, 1988). Year of release was included as an independent variable, and interaction between year of release and MPAA rating was included to test for "ratings creep." [3] Receiver Operator Characteristic (ROC) curves (Pepe, 2004) were used to examine how well MPAA rating categories distinguished between the amount (measured in seconds) of tobacco use, alcohol use, and sexual behavior in films of different ratings. A p-value of 0.05 was taken to indicate statistical significance.

Results

Risk behavior content differences by MPAA rating category

Tobacco use—Approximately three-quarters (76.6%) of films contained tobacco use (M = 132.31 seconds, SD = 243.48). Only 8.4% of the films portrayed adolescent smoking. Nearly one-fifth of films (18.1%) contained at least one scene in which there was a clearly negative reaction, either verbal or nonverbal, to a major or minor character's smoking. In films that clearly portrayed either major or minor characters using or handling tobacco products, 54.8% of films showed characters with cigarettes, 29.6% involved cigars, 7.8% involved pipes, 1.6% involved smokeless tobacco. Approximately one-fifth (21.4%) of films contained an identifiable tobacco brand. Tobacco use increased as MPAA rating increased ($p < .001$), with significant increases in mean seconds of smoking as ratings increased from G to PG, PG to PG-13, and PG-13 to R rated films (see Table 1). Overall, the amount of tobacco use in movies has decreased over time (see Figure 1). There was no significant interaction between year of release and MPAA rating on tobacco use.

Alcohol use—Approximately 89.6%of films contained some form of alcohol use (M = 199.78 seconds, SD = 214.92): 62.6% showed beer consumption, 68.0% showed wine consumption, and 73.6% showed consumption of liquor. 36.9% of films showed at least one character who was intoxicated by alcohol, and 12.9% of films portrayed alcohol consumption by underage drinkers. Approximately half (52.1%) of all films showed at least one identifiable alcohol brand during the film. Alcohol use exposure increased as the MPAA rating increased

[2]Violence also was not timed. Because of the often extended nature of violent portrayals and the way violence is often interwoven in the plot, it is difficult to reliably determine the beginning and end points of violent portrayals for timing. Therefore, a categorical variable assessing general frequency of violence in the film was used.

[3]As an additional test of "ratings creep," year of release was regressed on each outcome variable separately within each MPAA rating category. These results are not presented because there were no significant results to indicate that year of release was a significant predictor of an increase in content of any risk behavior within any rating category.

($p < .001$), with significant increases in seconds of alcohol use from G to PG and PG to PG-13 (see Table 1). Although R-rated films contained significantly more alcohol use than G and PG movies, there was no significant difference between the amount of alcohol use portrayed in PG-13 and R-rated films. The amount of alcohol use in movies has decreased over time, but it appears to be less of a decrease than for tobacco use (see Figure 1). There was no interaction between year of release and MPAA rating on alcohol use.

Sexual content—Three-quarters of films (75.2%) contained sexual content ($M = 30.81$ seconds, $SD = 44.76$). Nearly half (45.9%) of G rated films, 59.5% of PG rated films, 82.4% of PG-13 rated films, and 77.6% of R-rated films contained some kind of sexual content. Female full frontal nudity was shown in 3.6% of films and some aspect of female nudity (bare breasts or bare buttocks) were shown in an additional 20.6% of films. Female nudity only appeared in PG-13 and R-rated films. Male full frontal nudity was shown in 3.4% of films, and male bare buttocks were shown in an additional 14.8% of films. Male nudity appeared in PG, PG-13, and R-rated films. Seconds of sexual exposure increased as MPAA rating increased ($p < .001$), with significant increases in seconds of sexual behavior from G to PG, PG to PG-13, and PG-13 to R (see Table 1). Year of release was a significant predictor of sexual content, primarily due to a peak that occurred in 1999 (see Figure 1). There was no significant interaction between year of release and MPAA rating as a predictor of sexual content.

Drug use—Drug use appeared in 22.6% of films, and all but two of these 180 films were rated PG-13 or R (the two other films were rated PG and contained low salience drug use). Over half (52.7%) of the films that contained drug exposure had drug content that was rated as moderately or extremely salient. Very few films (2.9%) showed adolescent drug use. The following values indicate the percentage of the 900 films coded that contained each type of drug: marijuana, 11.7% of films; cocaine or crack, 5.6%; heroin or opiates, 2.9%; LSD or hallucinogens, 1.8%; club drugs, 1.6%; inhalants, 1.3%; other drugs, 2.6%. Characters were shown experiencing the effects of using a drug in 12.9% of films. Salience of drug use increased with MPAA rating ($p < .001$), with significant increases in mean salience ratings from G and PG to PG-13 and PG-13 to R. There was no significant difference in salience of drug use between G and PG movies. The proportions of films in each rating category with moderate or extreme drug use salience are reported in Table 1. There was no effect of year of release, and no interaction of year of release and MPAA rating on drug use salience.

Violence—Most all films (91.7%) contained violence of some kind, with 37.3% containing minimal violence, 29.3% containing moderate violence, and 25.0% containing frequent violence. Over half of films (52.2%) contained some kind of gory violence, with 24.1% portraying moderately or extremely gory images. Moderate and extreme gore was limited to PG-13 and R-rated films, although minimal gore did appear in G and PG films. Approximately 6.89% of films contained slasher-type violence (all were rated PG-13 or R), and 12.56% contained scenes with sadistic or brutal violent content (no G films contained sadistic or brutal content). Although interpersonal violence was not coded in films released after 2004 because of changes made to the content analysis protocol, this type of violence appeared in 86.2% of the 500 films released between 2000 and 2004. Frequency of violence (including all types of violence) differed by rating category ($p < .001$). Although G, PG, and PG-13 films did not differ from each other in mean frequency of violent content, R-rated films contained more violence than all other rating categories. The proportions of films in each rating category containing moderate or frequent violence appear in Table 1. There was no effect of year of release, and no interaction of year of release and MPAA rating on violence frequency.

Ability of MPAA ratings to discriminate tobacco and alcohol content

As predicted, there were statistically significant differences in mean levels of risk behavior content by MPAA rating category for tobacco use, alcohol use, sexual behavior, drug use, and violence. However, as shown in Figure 1, there was a high degree of overlap in the amount of tobacco and alcohol use across MPAA rating categories. The height of each curve in the figure is relative to the number of movies in each rating category that have at least some tobacco or alcohol use, so that the area under each curve represents the proportion of movies in each rating category with the indicated amounts of tobacco or alcohol use. For example, the 50th percentile for timed seconds of alcohol use in R-rated movies (162 seconds of exposure) corresponds to the 51st percentile for PG-13 rated movies, the 75th percentile for PG movies and the 94th percentile for G-rated movies. In other words, 49% of PG-13 movies, 25% of PG movies and 6% of G movies have sufficient alcohol use to place them with the top 50% of R-rated movies for this risk behavior. The 50th percentile for timed seconds of tobacco use in R-rated films (124 seconds of exposure) corresponds to the 74th percentile for PG-13 films, the 83rd percentile for PG films and the 97th percentile for G rated films. Correspondingly, 26% of PG-13 films, 17% of PG films and 3% of G rated films have sufficient tobacco use to place them with the top 50% of R-rated movies with respect to this risk behavior. The overlap in sexual behavior content between rating categories is also shown in Figure 2 as a comparison. There was somewhat less overlap between rating categories for sexual content compared to alcohol and tobacco use, suggesting that the rating categories are slightly better at distinguishing between the amount of sexual content than alcohol or tobacco content.

Discussion

Our analysis shows that the rating system does statistically differentiate *mean* levels of smoking, drinking, sexual behavior, violence, and drug use in movies, with R rated films containing the highest levels of each of these behaviors. However, as further analysis indicated, evidence of mean differences in the portrayal of risk behaviors across rating categories did not necessarily equate to the ability of any given rating to accurately describe the content of any specific film. When the variability in the amount of risk behaviors in films was taken into account, we found a large degree of overlap in content between rating categories. Particularly with regard to alcohol and tobacco content, we found that the rating categories do not adequately distinguish the amount of these behaviors portrayed in a movie. Although it is not the purpose of the currently established ratings categories to accurately distinguish amount of tobacco and alcohol use, viewing alcohol and tobacco use on screen have been empirically linked to adolescent initiation of smoking and drinking. Therefore, it is disconcerting that ratings, which are supposed to help parents decide whether or not their children should see a film, do not clearly differentiate how much of these behaviors were portrayed. The high degree of overlap between rating categories indicates that the MPAA ratings, as currently defined, are not an adequate proxy for tobacco or alcohol content in a movie and therefore are not useful for parents who may want to know about content that could influence the risk behaviors of their children. Additionally troubling is recent research by Jenkins and colleagues (Jenkins, Webb, Browne, Afifi, & Kraus, 2005) that found a similar effect for violent content — a variable that is supposed to directly contribute to MPAA ratings. In line with the present data, they found that despite mean differences in violent content in ratings, the violent content within each rating category varied to such an extent that the ratings did not adequately predict the level of violence in the film. On a practical level, the MPAA ratings may not differentiate content on a movie-by-movie basis as well as parents expect, despite the fact that the MPAA states that their ratings board “uses the same criteria as any parent making a judgment” when rating a movie (MPAA, 2005a).

Recently, in response to increasing pressure from anti-smoking groups, major public health organizations, and State Attorneys General, the MPAA announced that it will begin to consider cigarette smoking as a criterion when rating a movie (MPAA, 2007). In addition, it would be possible to add descriptive content codes to provide more specific detail about a films' smoking or drinking content. Although it is possible that this may make the rating system more informative for parents, our data suggest that anything short of a definitive rating for movies with smoking content is unlikely to clearly differentiate movies based on tobacco use. For example, even though the MPAA considers sexual content when rating a movie, we still found a substantial degree of overlap of sexual content in movies across all rating categories. Importantly, the significant degree of overlap would be missed by an analysis that concentrates only on statistical differences between average seconds of exposure. However, female nudity was not found in any G or PG movies because the MPAA has determined that nudity automatically warrants a higher rating. Similarly, in order to completely eliminate smoking from youth-rated movies, any movie with smoking would need to be assigned an R-rating.

We acknowledge that our measures of exposure do not take into account the context in which risk behaviors appeared in films. This context is likely to be very important in terms of which behaviors viewers' adopt. For example, characteristics of the context such as whether the person engaging in the behavior is a favorite actor of the viewer or a momentary background figure, or whether the behavior itself is portrayed as glamorous or buffoonish, will likely add to or detract from the power of the overall portrayal. The sexual content variable, in particular, included time of exposure to a range of behaviors including sexual intercourse as well as relatively benign romantic kissing, and did not differentiate the type or graphicness of sexual activity portrayed. Because we did not consider intensity or context of sexual behaviors, which presumably are considered by the ratings board, we may have overestimated the degree of overlap of sexual content across rating categories. However, the fact that even this rough measure of sexual exposure time seems to better distinguish between rating categories than tobacco or alcohol exposure is troubling given the known relationships between viewing tobacco and alcohol use in movies and teenage smoking and drinking. Drug use and violence were coded categorically, which limited our ability to directly compare them to the other variables in the ratings discrimination findings. However, it is clear that the MPAA ratings are much better at distinguishing drug use than violence based on our finding that none of the G or PG movies we coded contained high salience drug use, but approximately half of the G and PG movies contained high salience violence.

Overall, we found that the amount of tobacco and alcohol use in movies has decreased over time. This could suggest that the movie industry is responding to increasing pressure by public health groups to eliminate smoking from movies and/or that they are simply reflecting the decrease in smoking among the general population. We did not find support for increased risk behavior content over time for any movie rating and in fact, there was a general decline in the amount of smoking, drinking, and sexual behavior over time, suggesting that a "ratings creep" was not evident in these data. Ratings creep, however, is only one type of inconsistency that might affect the reliability and validity of move ratings (Gentile, Humphrey, & Walsh, 2005). The fact that the MPAA ratings do not clearly distinguish age-appropriate from age-inappropriate content indicates that the ratings are not a useful indicator of movie content for certain risk behaviors.

The MPAA rating system has been used by parents for almost four decades, and it is easily accessible and understandable to most parents. Studies have shown that an R-rating for a film is a reasonable proxy for high amounts of risk behaviors, including tobacco and alcohol content, and parental restriction of children's access to R-rated films is related to a lower risk of engaging in smoking and drinking (Dalton, Ahrens, et al., 2002; Jackson, Brown, & L'Engle, 2007; Sargent et al., 2004; Thompson & Gunther, 2006). However, the present analysis shows

that a substantial proportion of the lower rated movies may have as much alcohol and tobacco use as R-rated movies. If the intent of the MPAA rating system is to help parents select age-appropriate movies, it is clear that the system may need to be expanded to content beyond its current scope (violence, sexuality, and profanity) to include other health behavior content that has also been shown to be detrimental to children such as tobacco and alcohol. More extensive content-based ratings systems for films that do take tobacco and alcohol use into account are being developed and are currently available on the internet (e.g., http://www.ScreenIt.com, http://www.Kids-In-Mind.com, http://www.commonsensemedia.org). However, these guides are not as easily accessible as the MPAA ratings and it is unrealistic to expect that most parents have the time or resources required to consult them prior to each movie viewing. This study demonstrates that the MPAA criteria for determining a film's rating need to be updated to better reflect research demonstrating that adolescents are influenced by movie portrayals of risk behaviors, including alcohol and tobacco use. Future research should examine whether any updates to the rating system are useful for parents who are concerned about these behaviors.

Acknowledgments

This work was supported by National Cancer Institute grants CA94273 and CA108918. We thank Dan Nassau and Balvinder Rakhra for coding the movies; Diana Nelsen for supervising the content analysis; Jennifer Gibson for preparing the data files; and anonymous reviewers for comments on a previous version of the manuscript.

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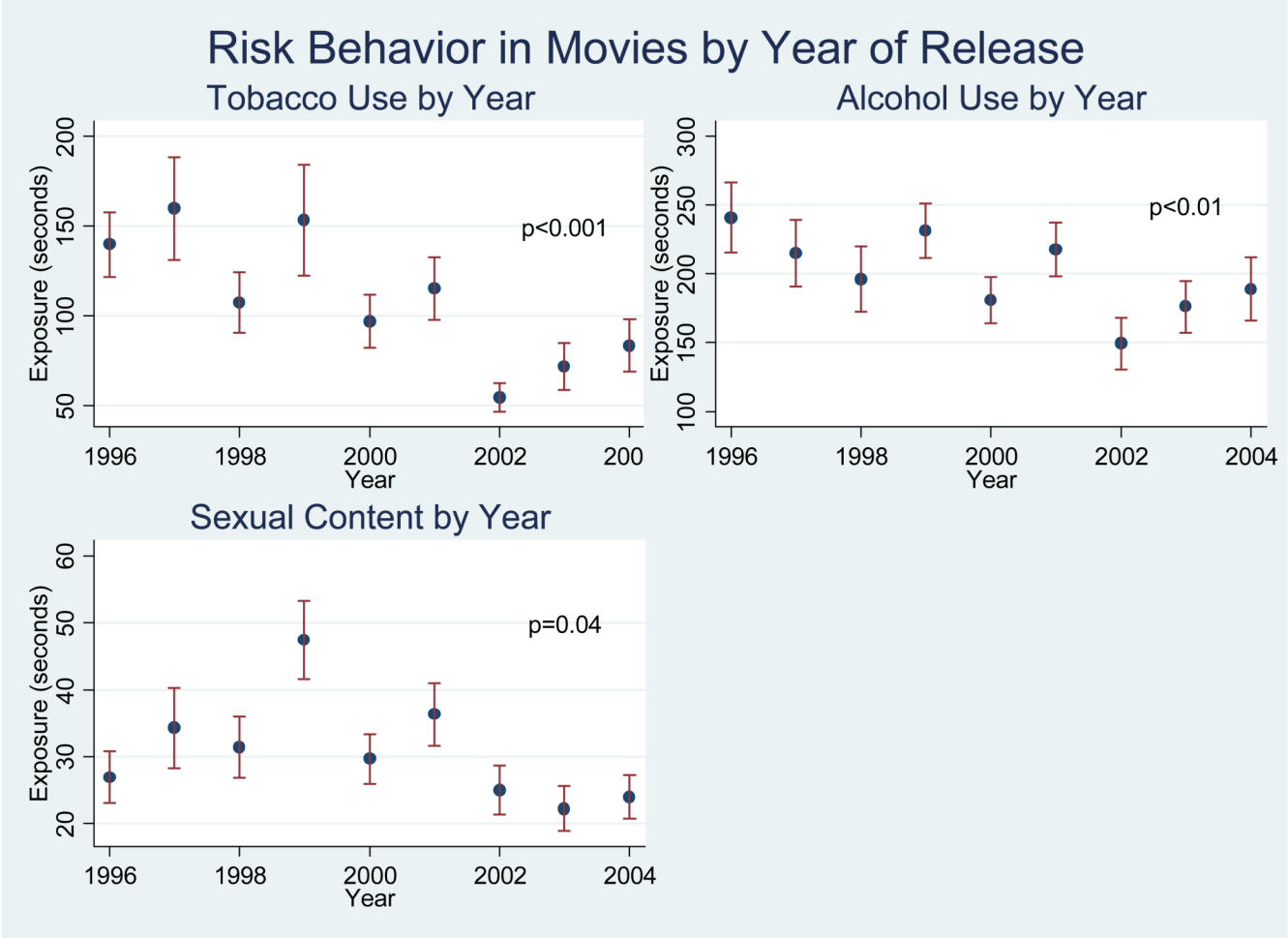

Figure 1. Risk Behavior in Movies by Year of Release

Note. P-values for change over time: Tobacco use p<0.001; Alcohol use p<0.01; Sexual behavior p= 0.04

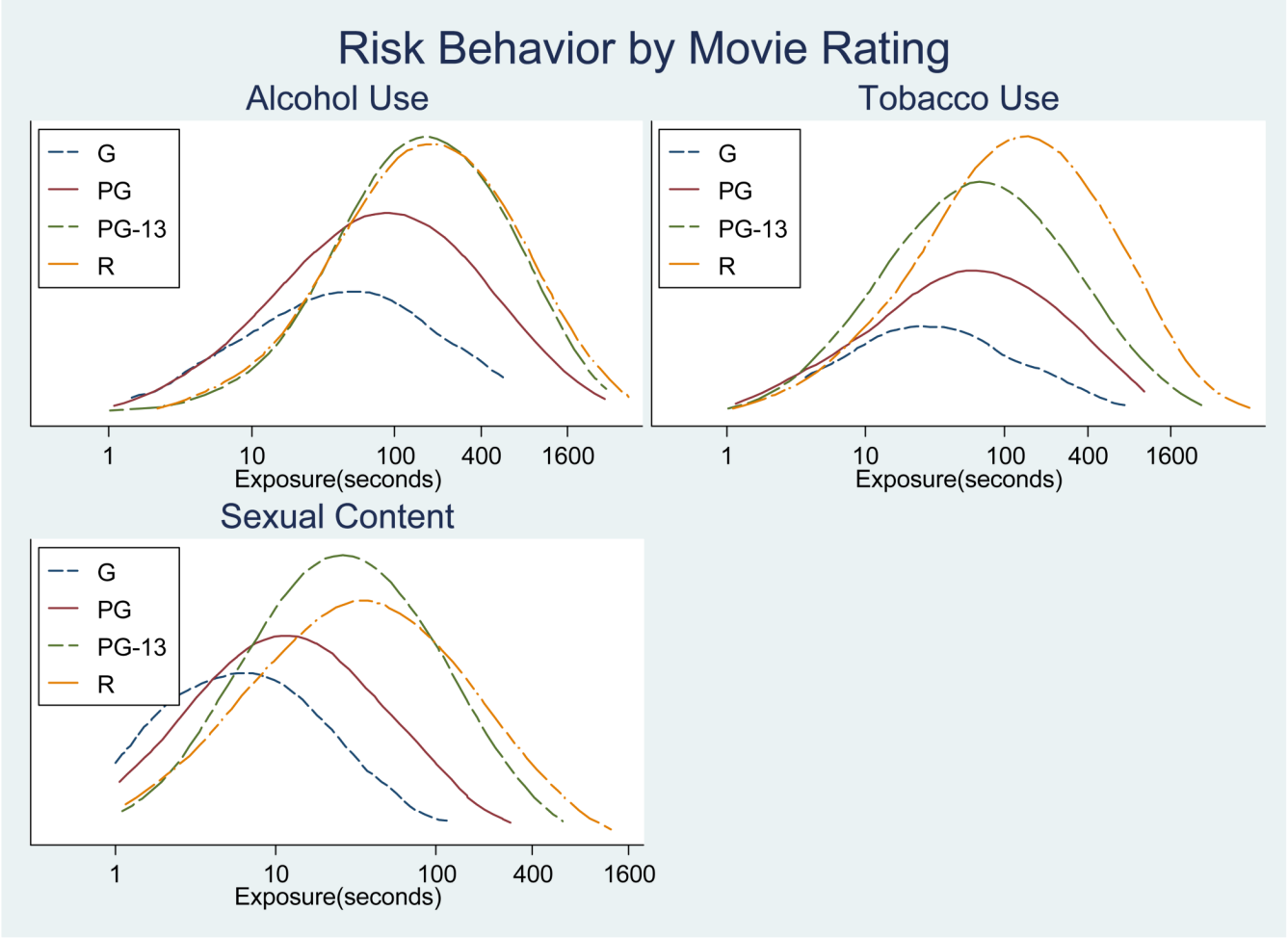

Figure 2. Receiver Operator Characteristic (ROC) Curves Illustrating the Degree of Overlap in Tobacco Use, Alcohol Use, and Sexual Behavior Content in Films by MPAA Rating*

*Note. The height of each curve is relative to the number of movies in each rating category that have at least some tobacco use, alcohol use, or sexual behavior. The area under each curve represents the proportion of movies in each rating category with the indicated amounts of that content.

Table 1

Exposure to Tobacco Use, Alcohol Use, Sexual Content, Drug Use, and Violence by MPAA Rating*

MPAA rating (N)	Mean seconds of tobacco use exposure (SD)	Mean seconds of alcohol use exposure (SD)	Mean seconds of sexual content (SD)	Proportion of films with high salience drug use (SD) †	Proportion of films with high frequency violence (SD) ‡
G (37)	14.6 (48.3)	32.0 (57.6)	4.0 (8.7)	0.0 (0.0)	48.6 (50.7)
PG (148)	39.6 (76.1)	122.6 (184.5)	10.4 (17.2)	0.0 (0.0)	56.8 (49.7)
PG-13 (363)	80.0 (133.4)	207.0 (190.6)	30.5 (34.9)	9.4 (29.2)	65.6 (47.6)
		G,PG	G,PG	G,PG	
R (352)	178.8(260.0)	242.4 (242.7)	42.6 (57.9)	20.7 (40.6)	88.1 (32.5)
	G,PG,13	G,PG	G,PG,13	G,PG,13	G,PG,13

*Note. Tukey's wholly significant difference test was used to compare means across tobacco exposure, alcohol exposure, and sexual content. A Bonferroni correction was used to compare proportions for drug use salience and violence. G notation indicates statistically different from G movies; PG statistically different from PG movies; 13 statistically different from PG-13 movies.

†High salience drug use included the categories moderate and extreme drug use.

‡High frequency violence contained the categories moderate and frequent violence.