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Violence is associated with sex and alcohol as often in PG-13 movies as in R-rated films

PHILADELPHIA – Nearly 90 percent of the top-grossing movies over a 25-year period show main characters acting violently, and in 77 percent of the movies those characters also engage in sex-, alcohol- or tobacco-related behavior, a new study has shown.

The study, by researchers at the Annenberg Public Policy Center at the University of Pennsylvania, found that more than half of the biggest PG-13 movies featured a main character acting violently and involved in either drinking, sexual behavior or smoking within a five-minute segment.

The study, published in the January 2014 issue of Pediatrics (online Dec. 9), shows there is essentially no difference between the most popular movies rated PG-13 for younger viewers and restricted, R-rated films in showing main characters engaged in both violence and alcohol use or violence and sexual behavior. These compounded depictions of risk are “potentially teaching youth that violence is as acceptable as these other behaviors,” the researchers said.

“We know that some teenagers imitate what they see on-screen,” said Amy Bleakley, lead author of the study and a senior research scientist at the Annenberg Public Policy Center. “What concerns us is that movies aimed at younger viewers are making a connection between violence and a variety of risky behaviors – sex, drinking and smoking.”

The study, “Violent Film Characters’ Portrayal of Alcohol, Sex, and Tobacco-Related Behaviors,” analyzed characters’ actions in five-minute segments in 390 of the biggest box office movies from 1985 to 2010. The study examined violence in combination with other potentially risky behaviors and suggested that adolescents, especially teens who are attracted to “novel and intense experiences,” may be particularly vulnerable to imitating the behavior in these films.

The ‘James Bond effect’

“There’s kind of a James Bond effect, in which violence is glamorized in combination with other behaviors we otherwise try to discourage in youth,” said Dan Romer, a co-author of the study and associate director of the Annenberg Public Policy Center (APPC). Movies in the study that exemplify this trend include the James Bond thrillers “Quantum of Solace” (2008) and “Casino Royale” (2006), as well “Mission: Impossible II” (2000), all rated PG-13 by the Motion Picture Association of America.
For example, in a five-minute segment in “Mr. & Mrs. Smith” (2005), also rated PG-13, Brad Pitt and Angelina Jolie pull guns on each other, kiss, tear each other’s clothes off and have sex – and then she hits him in the face.

Another APPC study recently published in Pediatrics showed that gun violence in top-selling PG-13 movies has tripled since 1985 and in 2012 exceeded the amount of gun violence in R-rated movies. That earlier study was done with Brad J. Bushman of the Ohio State University. For a short video on news coverage of that study: [http://youtu.be/oTYxyiL1-Eg](http://youtu.be/oTYxyiL1-Eg)

In the current study, violent characters appearing in R-rated movies were more likely than those in PG-13 movies to engage in “explicit sex,” a category that included nudity and intercourse. In analyzing characters who are involved in violence and explicit sex within the same five-minute segment of a movie, the study finds this occurred in 16.6 percent of R-rated movies and 7.8 percent of PG-13 films.

### A decline in tobacco and alcohol in the movies

In line with broader social trends, the current study found that tobacco use in the movies has declined dramatically. Tobacco use by main characters occurred in 68 percent of the movies studied from 1985 and in just 21.4 percent in 2010. In addition, violent characters were more often shown as smokers in R-rated movies than in PG-13 films, 57 percent to 30.1 percent.

Alcohol use in the movies also showed a decline in the biggest box-office movies. From 1985 to 2010, it fell from 89.6 percent to 67.3 percent, the study showed.

The MPAA’s PG-13 rating means that parents are “strongly cautioned” that some material “may be inappropriate” for children under 13. A movie rated R is restricted and viewers under 17 must be accompanied by a parent or adult guardian.

The researchers said the similarity in PG-13 and R movies regarding violent behavior accompanied by sex and alcohol “is troubling, and yet it is consistent with research on the questionable effectiveness of the ratings system as a tool to shield youth from inappropriate content. The reliability and validity of the ratings system are problematic and its usefulness for parents limited.”

The 390 movies were drawn from Variety magazine’s list of the top 30 movies each year from 1985, the first full year of the PG-13 rating, through 2010. Half of the top 30 movies each year were randomly chosen for the study, which used data from the APPC’s Coding of Health and Media Project ([www.youthmediarisk.org](http://www.youthmediarisk.org)). Up to eight main characters from each film were analyzed, and their behaviors were coded for violence, alcohol, tobacco and sexual content.

The study was written by Amy Bleakley, Dan Romer, and Patrick E. Jamieson of the Annenberg Public Policy Center. Funding was provided by the Annenberg Public Policy Center at the University of Pennsylvania and the Robert Wood Johnson Foundation.

The Annenberg Public Policy Center ([http://www.annenbergpublicpolicycenter.org](http://www.annenbergpublicpolicycenter.org)) was established in 1994 to educate the public and policy makers about the media’s role in advancing public understanding of political and health issues at the local, state and federal levels.

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