

Editorial

Are Motion Picture Ratings Reliable and Valid?

In this issue of the *Journal of Adolescent Health*, Nalkur et al report on the largest content analysis of movies, covering the years between 1950 and 2006 [1]. The authors compared the content in films with the industry ratings that had been applied to them to determine the accuracy and stability of those ratings. They found that the ratings were neither as accurate nor as stable as parents would probably want them to be. Although the title of the article cites the “effectiveness” of the Motion Picture Association of America (MPAA) rating system, this study is only a single piece of a much larger puzzle about what makes ratings effective. Ratings can only be effective when they are useful for parents, and this study does help to explain the low usage of ratings among parents.

Why do we need ratings at all? Ratings are only necessary when the following two conditions are met: (1) that it can be demonstrated that exposure to some types of media have harms or benefits, and (2) that using the ratings reduces the risk of harm or enhances the benefits. Both conditions have been supported by scientific research. Hundreds of studies have demonstrated that media violence exposure increases both the short-term and long-term risks of aggressive cognitions, feelings, and behaviors [2,3]. Although few in number, studies have also demonstrated that sex-related media exposure increases the risk of early initiation of sex or risky sexual behavior [4,5]. In contrast, some studies have demonstrated that educational or prosocial content exposure can have benefits by virtue of increasing educational success and prosocial behaviors [6,7]. However, despite these potential harms and benefits, research has also shown that when parents use ratings to help monitor or set limits on what their children watch, it acts as a protective factor—reducing the harm of violent content and enhancing the educational aspects [8–10]. Therefore, rating systems do play an important role in providing information regarding media products so that parents can make informed decisions about which are appropriate for their children. This is when ratings become truly “effective.”

However, for this goal to be met the ratings must be accurate, or to put it in more scientific terms, they must be both reliable and valid. Nalkur et al have provided evidence for

five types of scientific reliability and validity; however, there are several other additional types of scientific reliability and validity by which ratings may be judged [11]. First, they have provided evidence for “ratings creep,” demonstrating that PG-13 movies now include more violence when compared with earlier R-rated movies. This demonstrates a lack of temporal stability in the ratings, which is one measure of reliability. Second, they have provided evidence that sexual and violent content are treated differently, with sexual content much more clearly differentiated between the R-category and other categories, and no evidence of ratings creep for sexual content. This demonstrates a lack of consistency in standards for applying the ratings. Third, they found that there was no significant difference in explicit violence between G- and PG-rated films. This demonstrates a lack of both face validity and predictive validity, given that parents expect that they should be able to predict how much violence there is in a film from its rating, especially at the young end of the rating scale. Fourth, although the explicitness of both violence ($\rho = .25$) and sex ($\rho = .28$) were correlated significantly with the movie ratings (thereby demonstrating some convergent validity), note that these correlations were small. This means that no more than 10% of the variance in movie ratings is because of how explicit either the violent or sexual content is (although an analysis including both was not reported). This demonstrates a lack of content validity in the ratings. Although several other studies have provided similar evidence for the MPAA ratings (and for other media rating systems), Nalkur et al have provided the largest sample across the greatest length of time, thus making the data particularly strong [1,8,11].

These data help to answer a particularly important question—given that almost all American parents think that having ratings is a good idea, why don’t they use them more regularly [12]? In a national Harris Poll survey of parents, only 24% said that they use the movie ratings every time to decide whether their children could see a film [13]. When they were asked whether the ratings gave them the information they required, only 18% said yes, and only 6% said that they found the ratings to be always accurate.

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Clearly, parents recognize the lack of reliability and validity of the ratings, and therefore do not use them regularly, thereby making them far less effective than they could be.

This lack of efficacy is lamentable because it does not need to be this way. A great deal is known about what parents want, what makes a good rating system, and how to achieve high standards of reliability and validity [8,11,12,14–17]. Some might argue that applying scientific standards of reliability and validity to media ratings is inappropriate given the high volume of shows, films, video games, etc., that need to be rated in a timely manner. This seems to be an area where people of good conscience can honestly disagree. However, even if we accept this critique altogether, it does not mean that nothing can be done to improve the accuracy and effectiveness of the ratings. The American Academy of Pediatrics and others have made several recommendations, including a single universal rating system that could be used across media platforms [8,11,14,18,19]. Data such as those provided by Nalkur et al demonstrate that improvements should be made.

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