

### A Plea for Concern Regarding Violent Video Games

*To the Editor:* In the April issue of *Mayo Clinic Proceedings*, Hall et al<sup>1</sup> authored a “plea for caution” in the interpretation of research on the impact of viewing video violence on the development of children and youth.

The authors enumerated a series of investigations and reports on the impact of violence in media, including concerns about violence in comic books, movies, television, and video games. Additionally, they noted that the US Supreme Court was reviewing a California law that would ban the rental or sale of certain violent video games to those younger than 18 years. Hall et al pleaded for caution and expressed the hope that the Supreme Court would not be swayed by the evidence offered in support of the California law and suggested that the evidence was inconclusive on the effects of video violence and children. Indeed, the authors implied that all the research programs undertaken on the media violence topic during the past 50 to 60 years were merely examples of what they described as “moral panic” that emanated from well-intentioned but misguided concerns about society.

Hall et al went so far as to chastise the American Academy of Pediatrics (AAP) and the American Psychological Association (APA) for publishing reports and recommendations that urged their professional members to alert their patients and clients to the dangers of media violence. The authors argued that the evidence of harmful effects was so weak and confused that these professional organizations were being irresponsible (and perhaps incompetent) in expressing their concern about the dangers that viewing media violence pose for children and youth.

As professionals in communications, pediatrics, psychology, psychiatry, and public health, we are astounded by the inaccuracies evident in the conclusions offered by Hall et al. For example, they completely dismiss the extensive body of evidence accumulated during the past half century, starting with the Surgeon General’s research program on television violence and children in the late 1960s,<sup>2,3</sup> the National Institute of Mental Health review in the 1980s,<sup>4</sup> the review undertaken by the Group for the Advancement of Psychiatry in the 1980s,<sup>5</sup> and the comprehensive review by the APA in the 1990s.<sup>6</sup> In addition to overlooking these reviews by government and professional organizations, Hall et al raise an “old chestnut” of the *catharsis hypothesis*, suggesting that viewing media violence results in a purging of aggressive feelings and thereby reduces the likelihood of subsequent aggression. The catharsis hypothesis was popular in the 1960s and 1970s and was often cited by the media violence industry and its supporters. However, even the “father” of this notion, Seymour Feshbach,<sup>7</sup> abandoned this theory and recanted his claims concerning “catharsis” as early as the 1980s. Finally, the fact that Hall et al suggest that large scientific and professional organizations, such as the AAP or APA, produced frivolous or ill-considered reports on policy and practice is an indica-

tion that the authors are poorly informed about the processes involved in developing and disseminating such reports. In the case of the APA report, 2 of us (E.D. and J.P.M.) can verify, from first-hand experience, that the APA spent almost 6 years and supported the work of a task force of 9 psychologists before reaching the conclusions that were finally passed by the 170 members of the Council of Representatives of APA. Similarly, 2 of us (M.R. and V.S.) were involved in the rigorous reviews undertaken by the AAP. One of us (R.W.M.) was chair of the Group for the Advancement of Psychiatry report and can attest to the rigorous deliberations of that group. These reports were undertaken in a very serious manner, and Hall et al simply dismiss these reports casually.

We have collectively more than 200 years of professional experience in research, public health interventions, and communication concerning the effects of media violence on children and youth. Indeed, one of us (B.B.) was honored with the Order of Australia for advocacy for children’s media. We have reviewed evidence from hundreds of studies, both behavioral and neurologic, in both laboratory and natural environmental settings, both cross-sectional and longitudinal. For example, we refer readers to the reviews and commentary by Kunkel and Wilcox,<sup>8</sup> Pecora et al,<sup>9</sup> Rich,<sup>10</sup> and Strasburger.<sup>11</sup> The overwhelming conclusion to be drawn from this research is the fact that there are, indeed, harmful effects of viewing violence, as we noted in the aforementioned reviews.<sup>4-6</sup> As such, there is a great need for concern on the part of parents, policy makers, and professionals in regard to the unbridled expansion of media violence directed to youngsters.

Hall et al cite several reviews of research, notably that of Ferguson,<sup>12</sup> which suggest that the state of research on media violence is complex and confused. They dismiss other reviews, such as those by Anderson et al<sup>13</sup> and Huesmann,<sup>14</sup> as irrelevant or perhaps biased.

This strategy is similar to the writings of authors who have submitted amicus curia briefs to the Supreme Court in support of the video game industry. One of those amicus briefs, authored by Patricia A. Millett as Counsel of Record, claimed to have 82 signatories who were experts in media violence and were opposed to the belief that there are demonstrable effects of video violence on children and youth. In this instance, the so-called Millett Brief<sup>15</sup> stood in clear opposition to the briefs of the State of California, the petitioners in the Supreme Court case, and the so-called Gruel Brief<sup>16</sup> filed by Steven F. Gruel as Counsel of Record for the amicus brief of State Senator Leland Y. Yee, PhD, the California Chapter of the AAP, and the California Psychological Association. These dueling briefs would be worrisome if it were not for the fact that the 82 signatories of the Millett Brief have relatively little expertise in research or writing on the topic of media violence. In contrast, a large percentage of the 115 signatories of the Gruel Brief have outstanding credentials and are experts on the issue of media violence. A recent article in the *Northwestern University Law Review*<sup>17</sup> has provided a detailed comparison of the professional competence of the signatories of the 2 amicus briefs. Clearly, the professionals supporting the Gruel Brief are providing competent

and thoughtful analyses that urge professional concern about the harmful effects of media violence.

On June 27, 2011, the Supreme Court issued its decision<sup>18</sup> on the California Law restricting the distribution of some violent video games to minors. The Court, in a 7 to 2 decision (Justices Stephen Breyer and Clarence Thomas dissenting), determined that the California law was overly broad in restricting access to protected free speech by minors. It noted that the evidence of harmful effects of violent video games was not any stronger than the evidence showing harm from other violent video media and therefore the proposal from California was actually “underinclusive” because it did not propose to restrict those other violent video media such as Saturday morning cartoons. On this point, the Court noted that

Underinclusiveness raises serious doubts about whether the government is in fact pursuing the interest it invokes, rather than disfavoring a particular speaker or viewpoint....Here, California has singled out the purveyors of video games for disfavored treatment—at least when compared to book-sellers, cartoonists, and movie producers—and has given no persuasive reason why.<sup>18,p14, para 1</sup>

In his dissent, Justice Breyer noted that the evidence on video game violence being harmful was sufficient, and he appended a listing of about 150 research and review articles to support his claim. He concluded,

But what sense does it make to forbid selling to a 13-year old boy a magazine with a picture of a nude woman [as the Supreme Court did in *Ginsberg v. New York*] while protecting a sale to that 13-year-old of an interactive video game in which he actively, but virtually, binds and gags the woman, then tortures and kills her.<sup>18, p19, para 1</sup>

Nevertheless, the Court was firm in its majority opinion that violent video games are a form of speech protected by the First Amendment.

Given the outcome of the Supreme Court deliberations, it is clear that both government and industry are unlikely to find a common way to solve the problem of protection from harm. Also, given the strong conclusions from research that viewing violence can lead to harmful effects, such as changes in attitudes, values, and behavior favoring the use of aggression to resolve conflicts,<sup>4-6</sup> as well as possible neurologic changes produced by viewing violence,<sup>19-22</sup> it is imperative that health care professionals become knowledgeable about video violence and share that information with their patients.

Thus, it is our considered opinion that the Hall et al article urging caution in giving advice about the harmful effects of media violence is overly cautious, if not foolish. Additionally, it is our considered opinion that we need to be very concerned about the impact of media violence on children and youth, for all the reasons identified in the professional reports and research reviews cited. Of course, it is true that there are no easy solutions to these problems, but we must remember that children and youth represent our future and that they depend on us to provide a healthy and safe environment in which they may grow and develop. Given the complexity of the issues, we

may err no matter what choice we make, but should we not err on the side of *concern* by following the Hippocratic advice to “do no harm?” Thus, we end this commentary with “A Plea for Concern.”

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1. Hall RCW, Day T, Hall RCW. A plea for caution: violent video games, the Supreme Court, and the role of science. *Mayo Clin Proc.* 2011;86(4):315-321.

2. US Department of Health Education and Welfare; Surgeon General’s Scientific Advisory Committee on Television and Social Behavior. *Television and Growing Up: The Impact of Televised Violence*. Washington, DC: United States Government Printing Office; 1972. <http://profiles.nlm.nih.gov/ps/access/NNBCGX.pdf>. Accessed July 7, 2011.

3. Murray JP. Television and violence: implications of the Surgeon General’s research program. *Am Psychol.* 1973;28(6):472-478.

4. National Institute of Mental Health. *Television and Behavior: Ten Years of Scientific Progress and Implications for the Eighties: Vol. 1. Summary Report*. Washington, DC: United States Government Printing Office; 1982. <http://www.eric.ed.gov/PDFS/ED222186.pdf>. Accessed July 7, 2011.

5. Group for the Advancement of Psychiatry. *The Child and Television Drama: The Psychosocial Impact of Cumulative Viewing*. New York, NY: Mental Health Materials Center; 1982.

6. Huston AC, Donnerstein E, Fairchild H, et al. *Big World, Small Screen: The Role of Television in American Society*. Lincoln, NE: University of Nebraska Press; 1992.

7. Feshbach S. The stimulating versus cathartic effects of a vicarious aggressive activity. *J Abnorm Soc Psychol.* 1961;63(2):381-385.

8. Kunkel D, Wilcox B. Children and media policy. In: Singer D, Singer J, eds. *Handbook of Children and Media*. Thousand Oaks, CA: Sage; 2011.

9. Pecora N, Murray JP, Wartella EA, eds. *Children and Television: Fifty Years of Research*. Mahwah, NJ: Lawrence Erlbaum Associates; 2007.

10. Rich M. Is television healthy? The medical perspective. In: Pecora N, Murray JP, Wartella EA, eds. *Children and Television: Fifty Years of Research*. Mahwah, NJ: Lawrence Erlbaum Associates; 2007:109-148.

11. Strasburger VC. Why do adolescent health researchers ignore the impact of the media? *J Adolesc Health*. 2009;44(3):203-205.

12. Ferguson CJ. The good, the bad, and the ugly: a meta-analytic review of positive and negative effects of violent video games. *Psychiatr Q*. 2007;78(4):309-316.

13. Anderson CA, Sakamoto A, Gentile DA, et al. Longitudinal effects of violent video games on aggression in Japan and the United States. *Pediatrics*. 2008;122(5):e1067-e1073.

14. Huesmann LR. Nailing the coffin shut on doubts that violent video games stimulate aggression: a comment on Anderson et al. *Psychol Bull*. 2010;136(2):179-181.

15. Brief of Social Scientists, Medical Scientists, and Media Effects Scholars as *Amici Curiae* in Support of Respondents. *Arnold Schwarzenegger, Governor of California, et al, v Entertainment Merchants Association, et al*, No. 08-1448. 130 S Ct 2398 (2010). [http://www.theesa.com/policy/amici\\_filings\\_6\\_4197644452.pdf](http://www.theesa.com/policy/amici_filings_6_4197644452.pdf). Accessed July 7, 2011.

16. Brief of *Amicus Curiae* of California State Senator Leland Y. Yee, Ph.D, The California Chapter of the American Academy of Pediatrics, and the California Psychological Association in Support of the Petitioners. *Arnold Schwarzenegger, Governor of California, et al, v Entertainment Merchants Association, et al*. No. 08-1448 (2010). [http://www.americanbar.org/content/dam/aba/publishing/preview/publiced\\_preview\\_briefs\\_pdfs\\_09\\_10\\_08\\_1448\\_PetitionerAmCuLelandYee\\_AAP\\_CAandCAPsychAssn.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/publishing/preview/publiced_preview_briefs_pdfs_09_10_08_1448_PetitionerAmCuLelandYee_AAP_CAandCAPsychAssn.authcheckdam.pdf). Accessed July 7, 2011.

17. Sacks DP, Bushman BJ, Anderson CA. Do violent video games harm children? Comparing the scientific *amici curiae* "experts" in *Brown v. Entertainment Merchants Association*. *Nw U L Rev*. 2011;106(1):1-12. <http://www.law.northwestern.edu/lawreview/colloquy/2011/15/>. Accessed July 7, 2011.

18. *Brown, Governor of California, et al, v Entertainment Merchants Association, et al*. No. 08-1448. Argued November 2, 2010. Decided June 27, 2011. <http://www.supremecourt.gov/opinions/10pdf/08-1448.pdf>. Accessed July 7, 2011.

19. Anderson DR, Bryant J, Murray JP, Rich M, Rivkin MJ, Zillmann D. Brain imaging: an introduction to a new approach to studying media processes and effects. *Media Psychol*. 2006;8(1):1-6.

20. Murray JP, Liotti M, Ingmundson PT, et al. Children's brain activations while viewing televised violence revealed by fMRI. *Media Psychol*. 2006;8(1):25-37.

21. Weber R, Ritterfeld U, Mathiak K. Does playing violent video games induce aggression? Empirical evidence of a functional magnetic resonance imaging study. *Media Psychol*. 2006;8(1):39-60.

22. Strenziok M, Krueger F, Deshpande G, Lenroot RK, van der Meer E, Grafman J. Fronto-parietal regulation of media violence exposure in adolescents: a multi-method study [published online ahead of print October 18, 2011]. *Soc Cogn Affect Neurosci*. doi: 10.1093/scan/nsq079.

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### A Further Plea for Caution Against Medical Professionals Overstating Video Game Violence Effects

*To the Editor:* On the day I write this, the US Supreme Court has struck down California's attempt to ban violent video games to minors. The State of California, while acknowledging that existing research could not determine that video games cause harm to minors, nonetheless relied on a biased and misleading representation of the research in this field to support *their contention* that video games "harm" minors. Writing for the US Supreme Court majority, Justice Antonin Scalia noted that the research is in fact "not compelling" and "most of the studies suffer from significant, admitted flaws in methodology." The only "harm" by video games in this case is not to minors but to the scientific

community itself because it has insisted on an ideological position that increasingly has come at odds with the data.

In generations past, medical scholars warned society about the purported harms of various media ranging from dime novels through jazz music, comic books, rock and roll music, and Dungeons and Dragons (a role-playing game).<sup>1</sup> None of these fears materialized, and the scientific community expended significant capital in pursuing these beliefs long past the time in which data could support them. In their article, Hall et al<sup>2</sup> caution us that medical science may be repeating the errors of the past, ratcheting up claims of harmful video game violence effects even as data increasingly contradict such claims. As one of the leading video game researchers in the United States, I read this well-researched and timely article with great interest. To the warning by Hall et al, I add my own: Previous claims of "harm" due to video games were a mistake, and the medical community will only expend further political and scientific capital by insisting on the existence of harmful effects despite increasing evidence to the contrary.

Careful review of the scientific evidence reveals that not only are data increasingly pointing away from harmful effects but also that such data were never consistent even when some scholars attempted to claim they were.<sup>3</sup> Methodological problems abound in this field, including lack of valid aggression measures, failure to adequately control for other important variables, and a tendency to interpret weak and inconsistent results as if supportive of causal theories. However, although small in number, a few studies have corrected these issues. When aggression is measured using valid tools and other variables are carefully controlled, little evidence emerges for harmful video game violence effects.<sup>4,6</sup> Interestingly, these results are achieved regardless of the position in the debates the authors have taken in the past, although some scholars attempt to deemphasize their own results.<sup>5</sup> Prospective analyses have found little evidence for long-term harm,<sup>6</sup> and some suggest violent game exposure may be associated with reduced aggression.<sup>7</sup> Of 3 groups to have conducted meta-analyses on the topic, 2 replicated each other in concluding that no evidence exists for harmful effects.<sup>8,9</sup> Both these groups have been critical of the third group<sup>10</sup> for, among other issues, exaggerating the importance of the weak effects observed in their own research and failing to include studies that conflicted with their views. Add to these societal data in which the introduction of violent games into our society has been met with a precipitous decline in youth violence to 40-year lows, and we see that the data from various sources converge to oppose the belief that violent games are harmful.

These conclusions are not merely my own but are also based on a review of the literature by the Australian government,<sup>11</sup> to date the only independent review on the topic. (Policy statements by professional groups were compromised by committees of antigame scholars reviewing their own work and declaring it beyond further debate. Such statements should not be considered independent reviews.) The US Supreme Court now appears to concur in this assessment as well. Thus, comments by Hall et al and other scholars increasingly warn us of the damage done by the insistence on a rigid scientific