Déjà Vu: From Comic Books to Video Games: Legislative Reliance on “Soft Science” to Protect Against Uncertain Societal Harm Linked to Violence v. the First Amendment

* Professor of Law, Barry University Dwayne O. Andreas School of Law; LL.M. 1995, Yale University; J.D. 1991, University of Florida; M.S.S.A. 1976, Case Western Reserve University; B.A. 1974, University of Wisconsin, Madison. Many thanks to Erin Krenn and Louis Rosen for their invaluable research; to my friend and colleague, Professor Lee Schinasi, for challenging my legal assumptions; and to my coauthor, Ryan, for enriching my perspective.

† Adjunct Professor, Barry University Dwayne O. Andreas School of Law; Assistant Professor of Psychiatry, University of Central Florida College of Medicine, Department of Medical Education; Affiliate Assistant Professor, University of South Florida, Department of Psychiatry; 2008 Fellow in Forensic Psychiatry, Case Western Reserve University; 2007 Resident, Johns Hopkins Hospital, Department of Psychiatry and Behavioral Sciences; 2006 Rappeport Fellowship, American Academy of Psychiatry and the Law; M.D. 2003, Georgetown Medical School; B.A. 1999, Johns Hopkins University.
As children play kids’ games, the media, parents, legislators, and mental health professionals decry the unspeakable violence in these games and their effect on the psychological well-being of American youth. The controversy over how much violence is appropriate and whose role it is to decide what is or is not appropriate for children is not new. From Superman comics to Pac-Man, there has been a tug-of-war between advocates of censorship and advocates of expressive freedom. Both sides have been aided by scientific studies from the social sciences community to bolster their positions. Ultimately, the Supreme Court decides where the line is drawn.

---


2 The authors use the term “social sciences” to apply to research by psychiatrists, psychologists, and sociologists who examine effects on general populations, not necessarily individuals with medical conditions, such as schizophrenia. “Soft science” is distinguished from more traditional medical research.
between protecting kids or society from uncertain harm and protecting First Amendment rights.

Dating back to 1976, with the release of *Death Race*, violent video games became the target of this ongoing debate. Among American teens, playing video games is almost a universal pastime and has fueled an industry worth $10.5 billion. Half of the top selling video games contain violence. Examples of the most objectionable violence in video games include tearing victims in half; visiting prostitutes and beating them to death; and shooting schoolgirls, setting them on fire, and urinating on their corpses.

According to one judge, many of the most criticized video games “promote hateful stereotypes and portray levels of violence and degradation that are repulsive.” Despite numerous legislative attempts to restrict distribution and access of the most violent video games to minors, the controversy rages on. As quickly as legislatures enact statutes to ban violent video games from minors, the

---

3 Byrd, *supra* note 1, at 405–10 (detailing the history of the video game controversy).
8 *Id.* (stating that in *Grand Theft Auto: San Andreas* a “[p]layer recovers his health by visiting prostitutes then recovers funds by beating them to death”).
10 Video Software Dealers Ass’n v. Maleng, 325 F. Supp. 2d 1180, 1188–89 (W.D. Wash. 2004) (stating that, despite the repulsive nature of violent video games, the games cannot be suppressed merely because they are offensive; there must be substantial evidence showing the cause and effect relationship between the violence in video games and antisocial behavior in youths).
The tug-of-war continues between legislators trying to limit access to violent video games with the aid of social science professionals and courts cloaking those same video games in First Amendment protection.

Nine years ago, the Supreme Court denied certiorari to address the constitutionality of an ordinance restricting minors’ access to violent video games in public places. Since then, most federal courts reviewing government restrictions on access to or distribution of violent video games to minors have recognized the First Amendment protections afforded to these video games. Although the courts did not always agree on the reasons for their holdings, common themes emerged from these cases. First, no court was willing to recognize violence as a “new” category of unprotected speech or deem it

---

12 When there is overwhelming support for an action, the legislative process moves much faster than the judicial system. See Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572 (7th Cir. 2001) (discussing the many federal cases that have held legislation restricting access to violent video games unconstitutional).

13 Id. (holding a city ordinance limiting minors’ access to violent video games in public places unconstitutional because violent video games are protected by the First Amendment and are not subject to the Ginsberg variable standard applied to minors’ access to quasi-obscene materials and because social science linking violence and harm to children was insufficient to meet the government burden of strict scrutiny).

14 See Video Software Dealers Ass’n v. Schwarzenegger, 556 F.3d 950 (9th Cir. 2009), cert. granted sub nom. Schwarzenegger v. Entm’t Merchs. Ass’n, 130 S. Ct. 2398 (2010) (holding that restrictions on sale and rental of violent video games are subject to strict scrutiny and that the “variable obscenity” standard from Ginsberg does not apply); Interactive Digital Software Ass’n v. St. Louis Cnty., 329 F.3d 954 (8th Cir. 2003); James v. Meow Media, Inc., 300 F.3d 683 (6th Cir. 2002) (discussing a tort claim against video game providers brought by victims of a school shooting); Kendrick, 244 F.3d 572; Eclipse Enters., Inc., v. Gulotta, 134 F.3d 63 (2d Cir. 1997) (concluding that prohibition of the sale of trading cards depicting heinous crimes and criminals based on alleged harm to minors is unconstitutional); Video Software Dealers Ass’n v. Webster, 968 F.2d 684 (8th Cir. 1992) (finding a penalty for selling or renting violent videos to minors unconstitutional); Entm’t Merch. Ass’n v. Henry, No. CIV-06-675-C, 2007 WL 2743097 (W.D. Okla. Sept. 17, 2007); Entm’t Software Ass’n v. Foti, 451 F. Supp. 2d 823 (M.D. La. 2006); Entm’t Software Ass’n v. Hatch, 443 F. Supp. 2d 1065 (D. Minn. 2006); Granholm, 426 F. Supp. 2d 646; Entm’t Software Ass’n v. Blagojevich, 404 F. Supp. 2d 1051 (N.D. Ill. 2005); Maleng, 325 F. Supp. 2d 1180; Wilson v. Midway Games, Inc., 198 F. Supp. 2d 167 (D. Conn. 2002); Sanders v. Acclaim Entm’t Inc., 188 F. Supp. 2d 1264 (D. Colo. 2002). A few district courts upheld the restriction or denied a plaintiff’s motion for preliminary injunction, but these decisions were reversed on appeal. See Interactive Digital Software Ass’n, 329 F.3d 954; Kendrick, 244 F.3d 572.

15 The reasons for invalidating these restrictions usually fell into one of the following three categories: (1) vagueness, (2) overbreadth, or (3) less restrictive means were available. See cases cited supra note 14.
synonymous with obscenity for First Amendment purposes. Unlike obscenity, these courts declined to apply the Ginsberg “variable standard” to restrictions on violent depictions to minors. Further, the evidence on the causal connection between violent video games and harm to children or society was deemed insufficient to sustain these content-based restrictions. Finally, the courts determined that prohibiting the ability of minors to purchase, rent, or access violent video games was not the least restrictive means of achieving the state’s asserted interest in protecting children.

After almost a decade and a plethora of legal decisions reaching the same conclusion, the Supreme Court agreed to address the controversy over violent video games and the First Amendment. On April 26, 2010, the Court granted certiorari in Schwarzenegger v. Entertainment Merchants Ass’n, a case involving statutory restrictions and labeling requirements on the sale or rental of violent video games to minors. The Court’s decision to hear this case at this time probably has more to do with politics than law. However,
the Court will finally weigh in on two questions that have vexed legislators and challenged federal court judges: (1) whether violent video games are protected by the First Amendment and (2) if so, whether a direct causal link between violent video games and harm to children is necessary before a state may constitutionally prohibit the sale of violent video games to minors.\textsuperscript{23}

With an eye toward a Supreme Court decision sometime next year, this Article looks at the First Amendment implications of restrictions on violent video games and the tension between social sciences and the law in protecting children from uncertain harm that may be caused by violent video games. Part I chronicles the history of industry measures, in response to political pressure, to shield young children from the perceived negative effects of violence in various media. Part II addresses the First Amendment obstacles to imposing restrictions on violent video games. Part III reviews the current state of the conflicted scientific literature on the issue of violent video games and their effects on children. The potential biases and limitations of applying social science research to legal issues will be discussed, suggesting that the Court set high standards for using and reviewing social science research in First Amendment cases. This Article is not meant simply to predict how the Court will rule. It proposes a newly articulated standard for reviewing legislative findings when social science evidence is relied upon to support restricting First Amendment liberties. Finally, this Article will end on a cautionary note, concluding that politics and “soft science”\textsuperscript{24} should not dictate

York Times Co. v. Sullivan, 376 U.S. 254, 269–70 (1964) ("Those who won our independence believed . . . that public discussion is a political duty; and that this should be a fundamental principle of the American government." (quoting Whitney v. California, 274 U.S. 357, 375 (1927))). To the extent that the recent Supreme Court decisions in Citizens United v. FCC, 130 S. Ct. 876 (2010) (invalidating limitations on corporations’ campaign expenditures in federal elections), and United States v. Stevens, 130 S. Ct. 1577 (invalidating a statute criminalizing the commercial creation, sale, or possession of depictions of animal cruelty), have any relevance in this matter, the Court may have seized on Schwarzenegger v. Entertainment Merchants Association as another opportunity to rein in legislators from encroaching on First Amendment rights.


\textsuperscript{24} In Praise of Soft Science, Nature, June 23, 2005, at 1003 (arguing that social sciences do not receive the respect they deserve: “It is the conventional wisdom in the biological and physical sciences, and within research agencies, that the social sciences are, well, ‘soft,’ and lacking in methodological rigour.”).
First Amendment jurisprudence, even for the laudable goal of protecting children.

I
THE POWER OF POLITICIANS, ADVOCACY GROUPS, AND HEALTH SCIENCE RESEARCH TO CENSOR: THE “WERHER EFFECT”

The concern about the power of media to influence, stir emotions, and incite actions that are detrimental to society dates back centuries. The cultural and social impact of an eighteenth century book continues to reverberate in modern times. In 1774, Die Leiden des Jungen Werthers (The Sorrows of Young Werther) by Johann Wolfgang von Goethe was published. There was a strong belief that this work of fiction was the impetus for many young men from all parts of Europe to dress in particular clothing (boots, a blue coat, and a yellow vest), sit at a desk with an open book, and shoot themselves over unattainable love, emulating the protagonist in the book. The problem became so significant that the book was banned in many areas of Europe to protect young, easily influenced adolescents. Two hundred years later, sociologist David Phillips coined the term “Werther effect.” The “Werther effect” is still a valid and accepted psychological/sociological theory, which recognizes that works of fiction or news coverage can influence behavior, resulting in a public health concern such as suicide.

As the “Werther effect” was sweeping Europe, the seeds of the Temperance movement were beginning to take root in the United States. Historical figures in American medicine, such as Benjamin Rush (one of the founding fathers of American psychiatry), began public awareness campaigns about the medically harmful effects of

28 Id. at 341.
29 Steinberg, supra note 26.
alcohol. By the late 1880s, articles about the need to teach temperance showed up in peer-reviewed scientific journals, such as *Science.* By 1919, the Temperance movement, using a combination of scientific evidence and moral conviction, successfully engineered the ratification of the Eighteenth Amendment to the U.S. Constitution, beginning Prohibition.

From Prohibition to the present, the social science community has bolstered legal movements in trying to ban products that some segments of society consider harmful to the morals and well-being of minors. The comic books debate in the 1940s and 50s eerily mirrored the current debate over video games. Even though the Supreme Court had ruled that crime stories and pictures in magazines were protected by the First Amendment, politicians were not deterred from investigating the alleged bad effects of comic books. In 1954, the U.S. Senate Subcommittee to Investigate Juvenile Delinquency held hearings on the effects of comic books on America’s youth. The hearings focused primarily on crime and horror comic books, which graphically showed objectionable images, such as dismemberment.

---


33 Analogies to restrictions on minors’ access to alcohol and tobacco are often made to justify the legality of creating restrictions on violent video games. However, the differences are striking when considering the constitutionality of such restrictions. There are no constitutional amendments guaranteeing the right to smoke or drink (the Twenty-First Amendment repealed the Eighteenth Amendment, allowing alcohol to enter interstate commerce). Providing the Supreme Court will determine that violent video games are protected by the First Amendment, restrictions placed on minors’ access to video games will be held to higher scrutiny than similar bans on smoking or alcohol (which are subject only to a rational basis review). However, the social science community will not be dissuaded by the First Amendment from helping a “crusading group” demonstrate that violent video games are harmful to minors based on a combination of scientific evidence and moral convictions, as was done to bolster the Temperance movement.

34 U.S. CONST. amend. XVIII (repealed 1933).


37 See Menand, *supra* note 36.
Objectors to these comic books feared a decline in morals, an increase in violence, and an increase in general lawlessness and disrespect.38

Just like in the Temperance movement, the medical/social science community again entered the debate. Psychiatric journals published articles, such as *The Problem of Comic Books*39 and *The Psychopathology of Comic Books*.40 Many authors of such articles later testified before the Senate committee and other governmental agencies about their scientific studies on the topic of comic books and gave their predictions about how comic books would negatively impact children as they became adults.41 One of the leading

---

38 See *Juvenile Delinquency Hearings*, supra note 36 (statement of Dr. Frederic Wertham). Dr. Wertham stated:

I would like to point out to you one other crime comic book which we have found to be particularly injurious to the ethical development of children and those are the Superman comic books. They arose in children fantasies of sadistic joy in seeing other people punished over and over again while you yourself remain immune. We have called it the Superman complex.

In these comic books the crime is always real and the Superman’s triumph over good is unreal. Moreover, these books like any other, teach complete contempt of the police.

. . . .

All this to my mind has an effect, but it has a further effect and that was very well expressed by one of my research associates who was a teacher and studied the subject and she said, “Formerly the child wanted to be like daddy or mommy. Now they skip you, they bypass you. They want to be like Superman, not like the hard working, prosaic father and mother.”

*Id.* at 86.


41 See *Juvenile Delinquency Hearings*, supra note 36.

[Dr. Wertham:] Mr. Chairman, as long as the crime comic books industry exists in its present forms there are no secure homes. You cannot resist infantile paralysis in your own home alone. Must you not take into account the neighbor’s children?

. . . .

[Dr. Wertham:] In my opinion crime comic books as I define them, are the overwhelming majority of all comic books at the present time. There is an endless stream of brutality.

*Id.* at 84.

Senator Kefauver: Dr. Wertham, while you are on the Canadian matter, Canada, of course, has a law, which was probably passed largely on the testimony you gave the House of Commons in Canada, which bans the shipment of certain horror and crime books.
crusaders warned that “as long as the crime comic books industry exists in its present forms there are no secure homes.”42 As a result of the Senate hearings, the comic book industry implemented the Comics Code Authority standards, which are voluntary.43 Even as recently as 2002, an article entitled Violent Comic Books and Judgments of Relational Aggression published a finding that “social information processing of relationally aggressive situations is influenced by violent comic books, even if the comic books do not contain themes of relational aggression.”44 In lay terms, this finding suggests that even if comic books are nonviolent in terms of their content, they can affect how children perceive violence.

For over sixty years, politicians, advocacy groups, the scientific community, and the courts have debated the extent to which media violence affects children and the limits of government intervention. Although television’s voluntary rating system, instituted in the 1990s,
is of recent vintage, Congress held its first hearings on TV violence in 1952. Over a decade later, the Supreme Court addressed movie censorship by government-operated rating boards and held that these boards could approve movies but not ban them. In the wake of the Court’s decision, the Motion Picture Association of America adopted a voluntary rating system to provide age-appropriate information about the content of a movie and preempt government censorship.

The music industry received high-profile attention in the 1980s. Tipper Gore and the Parents’ Music Resource Center led a campaign for government-mandated content labeling of music. The movement’s work resulted in congressional hearings in 1985, where many musicians testified about fears of censorship. Again, to preempt government censorship, the music industry instituted a voluntary rating and labeling policy. The video game industry followed suit. In 1994, the Entertainment Software Rating Board (ESRB) established its own voluntary rating system for video games. It is no coincidence that the ESRB developed its voluntary

---


46 Id.

47 Freedman v. Maryland, 380 U.S. 51, 61 (1965) (holding unanimously that the procedural scheme of a Maryland motion picture censorship statute failed to provide for adequate safeguards against undue inhibition of protected expression because (1) if the censor disapproved of the film, the exhibitor was required to assume the burden of instituting judicial proceedings and persuading the court that the film was a protected expression; (2) once the board had acted against a film, the exhibition thereof was prohibited pending judicial review, however protracted; and (3) the statute provided no assurance of prompt judicial determination).


51 Id.

52 The ESRB adopted the following system: “EC” for early childhood, age three and above; “E” for everyone age six and above; “E+” for everyone age ten and above; “T” for teens age thirteen and above; “M” for mature, age seventeen and above; and “AO” for adults only, age eighteen and above. Game Ratings & Descriptor Guide, ENT. SOFTWARE RATING BOARD, http://www.esrb.org/ratings/ratings_guide.jsp (last visited Dec. 17, 2010). The ESRB’s system also applied “Content Descriptors.” Those related to violence
rating system after Congress proposed the Video Game Rating Act of 1994.53

Political efforts to censor, ban, and restrict have been aided by highly publicized cases linking heinous crimes to media portrayed violence. The principles of the “Werther effect” have been invoked to explain the horrific actions of infamous criminals.54 For example, John Hinckley, who shot President Reagan, allegedly decided to assassinate the President after seeing the movie Taxi Driver.55 The Beatles’ music allegedly influenced Charles Manson.56 Violent video games, movies such as The Basketball Diaries, and Stephen King’s book, Rage, have been blamed for school shootings.57 These acts of

---


One of the two great influences on the thinking of Charles Manson, along with the Book of Revelation, was the musical group the Beatles. According to Family members, Manson would most often quote “the Beatles and the Bible.” The two influences were linked, in that Manson saw the four Beatles members as being the “four angels” referred to in Revelation 9. Revelation 9 also tells of “locusts”—the Beatles, of course—coming out upon the earth. It describes prophets as having “faces as the faces of men” but with “the hair of women”—an assumed reference too [sic] the long hair of the all-male English group. In Revelation 9, the four angels with “breastplates of fire”—electric guitars—“issued fire and brimstone”—song lyrics.

Id.

57 See, e.g., James v. Meow Media, Inc., 300 F.3d 683, 687–88, 701 (6th Cir. 2002) (affirming the dismissal of a tort action brought by the parents of victims of a high school shooting in Paducah, Kentucky, claiming that violent video games, movies, and Internet sites desensitized the shooter to violence and caused him to kill the students); Watters v. TSR, Inc., 904 F.2d 378, 384 (6th Cir. 1990) (holding that the mother of a teenage boy who played Dungeons & Dragons had no claim against the game manufacturer for her
violence, which fill headline news and saturate twenty-four-hour news cycles, provide “evidence” for those with an agenda to push for legislative action. However, while these cases highlight a potential correlation between media violence and action, especially in individuals suffering from mental illness, they do not prove causation.

II
FIRST AMENDMENT OBSTACLES TO BANNING VIOLENT VIDEO GAMES

Litigation over kids’ access to violent videos has spanned well over a decade. Over this time, legislators have become more sophisticated in drafting legislation, learning from the constitutional defects of other jurisdictions’ legislative attempts. However, the lawyers defending this legislation have had an uphill battle, pressing novel and creative legal theories to persuade courts “to boldly go where no court has gone before.”

A. Applying the Miller Obscenity Test and the Ginsberg Variable Standard

Every First Amendment challenge begins with the query: “Does the restriction target speech or non-expressive conduct?” The Schwarzenegger case will provide the Supreme Court with the opportunity to definitively answer this question as it relates to video

son’s suicide); Sanders v. Acclaim Entm’t, Inc., 188 F. Supp. 2d 1264, 1281 (D. Colo. 2002) (holding that video game makers and movie producers and distributors owed no duty of care to a shooting spree victim who was shot and killed by two students after the students allegedly viewed violent materials produced or distributed by the defendants).

58 See Video Software Dealers Ass’n v. Webster, 968 F.2d 684 (8th Cir. 1992) (striking down a Missouri statute prohibiting the sale or rental of violent videos to minors and requiring stores to display or maintain those videos in separate areas).

59 See Video Software Dealers Ass’n v. Schwarzenegger, 556 F.3d 950, 957 (9th Cir. 2009), cert. granted sub nom. Schwarzenegger v. Entm’t Merchs. Ass’n, 130 S. Ct. 2398 (2010) (discussing the California statute and the fact that legislators included certain provisions “with the express goal of avoiding the constitutional pitfalls indentified in Video Software Dealers Ass’n v. Maleng”).

60 Id. at 961.

61 Conduct is not subject to First Amendment protection unless it qualifies as “expressive” conduct, such as flag burning or nude dancing. See Barnes v. Glen Theatre, Inc., 501 U.S. 501, 505–66 (1991) (stating that nude dancing was expressive conduct protected by the First Amendment); Texas v. Johnson, 491 U.S. 397, 420 (1989) (holding that Johnson’s conviction for burning an American flag violated the First Amendment).
However, “the notion that video games are protected free speech . . . is becoming widely adopted in Circuit Courts around the United States.” For the Supreme Court to hold contrary to the four circuits that have decided the issue, the Court would have to do some hair splitting between movies and video games. Over a half century ago, the Court recognized that movies were protected by the First Amendment. Nevertheless, proponents of violent video game restrictions argue that the interactive nature of video games distinguishes them from movies. This argument has been unsuccessful. In fact, one court acknowledged that the interactive aspect of video games enhances their expressive nature.

Having to concede that video games are a form of expression protected by the First Amendment, government lawyers argue that violent video games are synonymous with obscenity. In fact, legislation is drafted “bracket[ing] violence with sex” in an attempt “to squeeze the provision on violence into a familiar legal pigeonhole . . . of obscenity.” If violence can be “squeezed into” obscenity, then most regulations on violent video games will easily survive constitutional scrutiny. Obscenity belongs to one of those “well-defined and narrowly limited classes of speech, the prevention and

---

63 Entm’t Software Ass’n v. Granholm, 426 F. Supp. 2d 646, 650–51 (E.D. Mich. 2006); see also Schwarzenegger, 556 F.3d 950; Interactive Digital Software Ass’n v. St. Louis Cnty., 329 F.3d 954 (8th Cir. 2003); James v. Meow Media, Inc., 300 F.3d 683 (6th Cir. 2002); Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572 (7th Cir. 2001).
64 See cases cited supra note 63.
66 See, e.g., Granholm, 426 F. Supp. 2d at 651.
67 Id.
68 See generally Schwarzenegger, 556 F.3d 950; Granholm, 426 F. Supp. 2d 646; Interactive Digital Software Ass’n, 329 F.3d 954; Meow Media, Inc., 300 F.3d 683; Kendrick, 244 F.3d 572.
69 Kendrick, 244 F.3d at 574.
70 This statement presupposes that such regulation satisfies the Miller test. See Miller v. California, 413 U.S. 15, 24 (1973) (requiring the definition of obscenity to include that the work considered as a whole (1) appeals to prurient interests; (2) is patently offensive to prevailing standards in the community; and (3) lacks serious literary, artistic, political, or scientific value). The regulation at issue in Schwarzenegger tracks the Miller definition for obscenity but applies the variable standard for minors articulated in Ginsberg v. New York, 390 U.S. 629 (1968). See Schwarzenegger, 556 F.3d at 960.
punishment of which have never been thought to raise any Constitutional problem.”  

Further, the defenders of government restrictions argue for the application of a variable obscenity standard, which was articulated in *Ginsberg v. New York*. The *Ginsberg* variable standard would permit restrictions on particular violent video games for kids, while the same video games would be perfectly legal for adults. In *Ginsberg*, the Court determined that it was acceptable to restrict minors from sex-related material (otherwise legal for adults) “if it was rational for the legislature to find that the minors’ exposure to such material might be harmful.” If the Supreme Court is poised to articulate a “variable obscenity/violence” standard for kids, then theoretically under *Ginsberg*, a restriction would be upheld so long as it is rational for the legislature to find that violent video games might be harmful to kids. 

Lawmakers have not rested on mere common sense about the dangers of violent video games in their efforts to restrict access to them by minors. Instead, they have relied on social science research to support their legislative findings and articulate the governmental interests served by the proposed regulations. The cases are replete with professional studies used by both parties to bolster their positions. To date, the courts have concluded that the experts’ studies on the effects of violent video games do not show a sufficient causal relationship between exposure to violent video games and

---

72 *Ginsberg*, 390 U.S. 629 (upholding a New York statute that prohibited the sale of “girlie” magazines and other such materials to minors, even though these materials were not prohibited for adults).
73 See id.
74 Id. at 639.
75 Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572, 579 (7th Cir. 2001) (“*Ginsberg* did not insist on social scientific evidence that quasi-obscene images are harmful to children. The Court . . . thought this a matter of common sense.”).
76 Id. at 578 (distinguishing the lack of proof in *Ginsberg* about the harm girlie magazines caused to kids from the violent video games restriction, which required social science evidence).
77 See id.
78 See, e.g., id.
harm to children.\textsuperscript{79} The Supreme Court will soon decide the level of causation that is sufficient to justify restrictions.\textsuperscript{80}

Courts have steadfastly refused to apply a variable obscenity standard to violent video games. Striking down a restriction on minors’ access to violent video games, Judge Posner said: “We are in the world of kids’ popular culture. But it is not lightly to be suppressed.”\textsuperscript{81} Supreme Court precedent recognizes that minors are entitled to First Amendment protections, and any restrictions on the distribution of protected material to them must be “narrow and well-defined.”\textsuperscript{82}

Further, the argument that violence is synonymous with obscenity has been rejected over and over again. Twenty-five years ago, Indianapolis enacted an ordinance that prohibited words or pictures portraying women in sexually submissive ways, which included violence.\textsuperscript{83} The city tried to characterize the proscribed expression as low value speech and “enough like obscenity” that it could be prohibited.\textsuperscript{84} But, the court rejected the city’s argument.\textsuperscript{85} Advocating an expansion of the obscenity category to include other offensive speech because of its harm to society or its ability to influence attitudes was as unsuccessful then as it is today. The courts addressing violent video game restrictions have been unwilling to go where no other court has gone by expanding the definition of obscenity beyond its legal meaning.\textsuperscript{86} In the context of the First Amendment, the word “obscenity” means materials dealing with sex in a way that appeals to prurient interest.\textsuperscript{87}

\textsuperscript{79} See cases cited supra note 63.
\textsuperscript{80} See 08-1448 Schwarzenegger v. Entertainment Merchants Association, supra note 23.
\textsuperscript{81} Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572, 578 (7th Cir. 2001).
\textsuperscript{82} Erznoznik v. City of Jacksonville, 422 U.S. 205, 212–13 (1975).
\textsuperscript{83} Am. Booksellers Ass’n, Inc. v. Hudnut, 771 F.2d 323, 324 (7th Cir. 1985).
\textsuperscript{84} Id. at 331.
\textsuperscript{85} Id. at 331–32.
\textsuperscript{86} See Video Software Dealers Ass’n v. Maleng, 325 F. Supp. 2d 1180, 1185 (W.D. Wash. 2004) (rejecting the government’s argument that obscenity is not limited to sexual material because the “Latin root ‘obscaenus’ literally means ‘of filth’ and has been defined to include that which is ‘disgusting to the senses’ and ‘grossly repugnant to the generally accepted notions of what is appropriate’”).
\textsuperscript{87} Miller v. California, 413 U.S. 15, 18 n.2 (1973).
Unable to pigeonhole violence in the category of obscenity, there have been a few feeble attempts\(^\text{88}\) to argue that violent video games belong in another category of unprotected speech, as defined in *Brandenburg v. Ohio*.\(^\text{89}\) *Brandenburg* established a category of unlawful advocacy: speech inciting unlawful activity that is both imminent and likely to occur.\(^\text{90}\) The connection between *Brandenburg*’s incitement and violent video games stems from the fact that some legislatures have stated that the restrictions are necessary to prevent violence and antisocial behavior. Because there is little evidence linking violent video games to future criminal activity, the courts rejected the characterization of violent video games as unprotected speech that incites and is likely to produce imminent criminal activity.\(^\text{91}\)

**B. Creating a New Category of Unprotected Speech After United States v. Stevens**

“‘From 1791 to the present,’ . . . the First Amendment has ‘permitted [categorical] restrictions [based on] the content of speech in a few limited areas.’”\(^\text{92}\) These categories of unprotected speech have a long history and tradition.\(^\text{93}\) The content areas which fall outside the umbrella of First Amendment protection include obscenity, defamation, fraud, speech integral to criminal activity, incitement, and child pornography.\(^\text{94}\) The premise of “carving out”

---

\(^{88}\) See Video Software Dealers Ass’n v. Schwarzenegger, 556 F.3d 950, 961 n.15 (9th Cir. 2009), *cert. granted sub nom.* Schwarzenegger v. Entm’t Merchs. Ass’n, 130 S. Ct. 2398 (2010) (discussing district courts’ rejection of the argument that, because violent video games are alleged to cause violent, aggressive, and antisocial behavior, they belong in the unprotected incitement category and noting that courts rejected this argument because, even if there is evidence of some future effect, the unlawful activity must be both imminent and highly likely to occur in order for video games to be categorized as unprotected incitement).

\(^{89}\) *Brandenburg* v. Ohio, 395 U.S. 444, 447 (1969) (stating that advocacy that “is directed to inciting or producing imminent lawless action and is likely to incite or produce such action” is not protected).

\(^{90}\) *Id.*

\(^{91}\) See, e.g., James v. Meow Media, Inc, 300 F.3d 683 (6th Cir. 2002).


\(^{94}\) *Stevens*, 130 S. Ct. at 1580 (listing categories of unprotected speech that are based in history and tradition and are well known to the bar). Usually “fighting words” is included
islands of unprotected speech was first articulated in *Chaplinsky v. New Hampshire.*\(^95\) Listing the categories considered historically unprotected at the time, the Court stated that these categories of speech were “of such slight social value as a step to truth that any benefit that may be derived from them is clearly outweighed by the social interest in order and morality.”\(^96\) The *Chaplinsky* list has expanded over time, and the legal definitions and standards applied to these categories of unprotected speech have changed. However, all of these categories are historically grounded, a fact the Court emphasized just a year ago in *United States v. Stevens.*\(^97\)

In *Stevens,* the Court affirmed the Third Circuit’s reversal of the conviction of a man charged with selling videos of dog fighting in violation of a federal statute.\(^98\) Enacted primarily to target “crush videos,”\(^99\) the relevant statute criminalized “the commercial creation, sale, or possession of certain depictions of animal cruelty.”\(^100\) The Court held that the statute was a content-based regulation of protected speech that was substantially overbroad and facially unconstitutional.\(^101\)

Instead of arguing that its content-based regulation satisfied strict scrutiny,\(^102\) the government advocated for a categorical exclusion from First Amendment protection.\(^103\) The government argued that depictions of animals being abused have such slight social value as to

\(^95\) *Chaplinsky,* 315 U.S. at 571–72.

\(^96\) *Id.* at 572.

\(^97\) *Stevens,* 130 S. Ct. at 1585 (stating that the Court was unwilling to create a category of unprotected speech for depictions of animal cruelty based on an “ad hoc balancing of relative social costs and benefits”).

\(^98\) *Id.* at 1592.

\(^99\) *Id.* at 1579 (describing crush videos as videos “which feature the torture and killing of helpless animals and are said to appeal to persons with a specific sexual fetish”).

\(^100\) *Id.* at 1582.

\(^101\) *Id.* at 1592.

\(^102\) Content-based speech regulations must satisfy strict scrutiny and are presumptively invalid. See, e.g., *R.A.V. v. City of St. Paul,* 505 U.S. 377, 382 (1992). The government must demonstrate that the regulation is the least restrictive means of achieving a compelling government interest. See, e.g., *Sable Commc’ns v. FCC,* 492 U.S. 115, 126 (1989).

\(^103\) *Stevens,* 130 S. Ct. at 1585.
be unworthy of First Amendment protection. Adopting an ad hoc balancing approach, the government asserted that the value of the videos was clearly outweighed by their social costs and, like child pornography, animal cruelty depictions belong in their own category of unprotected speech.

As in the violent video game cases, the government invoked the *Miller* definition for obscenity to support its argument that animal abuse videos are undeserving of First Amendment protection. The government considered the third prong of the *Miller* obscenity definition, which requires an inquiry into whether the material has “serious literary, artistic, political, or scientific value.” Applying the third prong of the obscenity definition, the government argued that, because the animal abuse videos lacked serious value, they were not protected by the First Amendment.

The majority opinion in *Stevens*, written by Justice Roberts, foreshadows the difficulty California will have in defending the constitutionality of its violent video games restriction. First, Justice Roberts closed the door to the argument that the category of obscenity or its definition is expansive enough to include offensive depictions unrelated to sex. Justice Roberts affirmed the judges’ conclusions in all the violent video game cases: *Miller* relates to sexual material only. The “violence as obscenity” argument is dead.

Further, arguing for a categorical exception to the First Amendment for violent video games is futile. According to Justice Roberts, there is no “free-floating” cost-benefit analysis for determining on an ad hoc basis that particular subjects of speech are unworthy of First Amendment protection. Justice Roberts had a strong reaction to the government’s assertion that First Amendment speech protections depended upon weighing the “value of the speech against its societal costs,” stating that such a “test for First Amendment coverage . . . is startling and dangerous.”

---

104 Id.
105 Id.
106 Id. at 1591.
107 Id. (quoting the third prong of the obscenity test articulated in *Miller v. California*, 413 U.S. 15, 24 (1973)).
108 Id.
109 See id. at 1591–92.
110 Id. at 1585.
111 Id.
Finally, any categorical exclusion for speech must be rooted in history and "linked to the crime from which it came."\textsuperscript{112} The First Amendment exclusion for depictions of child pornography is "intrinsically related" to the underlying crime of child abuse, historically recognized as an illegal activity.\textsuperscript{113} The Court did not rule out the possibility of future recognition of "categories of speech that have been historically unprotected" but not yet identified or discussed in case law.\textsuperscript{114} However, this caveat does not provide California a "crack in the door" for arguing that violent video games, as a category, are undeserving of First Amendment protection.

There is no underlying crime linked to violent video games. Further, violence has been and continues to be an integral part of human existence. It is self evident; there is no deeply rooted, historical basis to categorically exclude violent depictions from First Amendment protection, even if the exclusions are limited to children. As the Supreme Court reiterated in \textit{Stevens}, mere offensiveness and lacking social value are not benchmarks for First Amendment protection.

\section*{C. Content-Based Restriction and Meeting Strict Scrutiny}

Even if violent video games do not qualify for a categorical exclusion from First Amendment protection, they may still be regulated. However, regulations on violent content in video games are subject to strict scrutiny.\textsuperscript{115} Content-based restrictions are "presumptively invalid,"\textsuperscript{116} so the government must prove that the restriction "is necessary to serve a compelling state interest."\textsuperscript{117} This was the obstacle that \textit{Schwarzenegger} and all of the cases prior were unable to overcome.

In satisfying strict scrutiny, the government cannot simply "posit the existence of the disease sought to be cured." It must demonstrate that the recited harms are real, not merely conjectural, and that the regulation will in fact alleviate these harms in a direct and material

\begin{footnotesize}
\textsuperscript{112} \textit{Id.} at 1586 (quoting Ashcroft v. Free Speech Coal., 535 U.S 234, 249–50 (2002)).

\textsuperscript{113} \textit{Id.} (quoting New York v. Ferber, 458 U.S. 747, 759 (1982)).

\textsuperscript{114} \textit{Id.}


\textsuperscript{116} \textit{Id.} at 382.

\textsuperscript{117} \textit{Id.} at 403.
\end{footnotesize}
way.” The Court has demanded that the government meet this burden with “substantial evidence” and in a way that restricts the least amount of protected speech. The legal debate surrounding violent video game restrictions focuses on the amount and the strength of evidence necessary for the government to satisfy its burden. Schwarzenegger provides the opportunity for the Court to answer this debate by deciding whether “substantial evidence” requires a showing of a direct causal link between violent video games and physical and psychological harm to minors.

Over time, in passing violent video game restrictions, legislators articulated their compelling interests (to be served by the restriction) in more narrow terms, from reducing future potential harms to kids and society to protecting against actual, measureable effects on kids’ brains. A review of the scientific studies used by parties on both sides of the violent video game debate is presented below. However, the point illustrates that legislators responded to courts’ unwillingness to restrict protected speech based on nebulous, attenuated concerns and inconclusive scientific evidence to support the legislative findings that restricting violent video games would cure the perceived harm.

It is not enough to restrict otherwise protected speech based on society’s general belief that exposure to violence can be harmful to children. Like virtual child pornography, restrictions on violent video games should be supported by a showing that exposure to violence causes actual harm to children. The Supreme Court held that

---

118 Turner Broad. Sys., Inc. v. FCC, 512 U.S. 622, 664 (1994) (internal citation omitted) (quoting Quincy Cable TV, Inc. v. FCC, 768 F.2d 1434, 1455 (D.C. Cir. 1985)).

119 R.A.V., 505 U.S. 377. The narrow tailoring that is required of legislative drafters (in order to reach the least amount of protected speech) is challenging. It is difficult to distinguish with razor sharp precision which depictions are “harmful enough” to restrict from those that are not. For First Amendment purposes, the legislation cannot be overinclusive nor underinclusive. See United States v. Nat’l Treasury Empls. Union, 513 U.S. 454, 462 (1995). An overinclusive statute fails because it reaches too much protected speech. Id. An underinclusive statute fails because it does not directly serve the state’s interest. Id. Also, legislatures struggle with defining violent depictions subject to statutory restrictions with enough specificity to survive a void for vagueness challenge. See, e.g., Video Software Dealers Ass’n v. Schwarzenegger, 556 F.3d 950, 954 n.7 (9th Cir. 2009), cert. granted sub nom. Schwarzenegger v. Entm’t Merchs. Ass’n, 130 S. Ct. 2398 (2010).

120 See generally Schwarzenegger, 556 F.3d 950.

121 See id.

122 Interactive Digital Software Ass’n v. St. Louis Cnty., 329 F.3d 954, 959 (8th Cir. 2003).
restrictions on virtual child pornography violated the First Amendment. 123 Unlike actual child pornography, which causes harm to real children, virtual child pornography is produced using computer animation or adults who look like children. 124 Because there is little scientific evidence to show that purveying child pornography (actual or virtual) leads to increased child abuse or pedophilia, the Court distinguished between actual and virtual child pornography for purposes of First Amendment protection. 125 Where no harm could be established, the Court held that the content-based restriction against virtual child pornography was facially unconstitutional. 126

Restrictions on violent video games suffer the same infirmity. Furthermore, even if there is a link between violent video games and actual harm, strict scrutiny requires the government to use the least restrictive means to cure the “evil” or to show why less restrictive means are not effective. 127 As the courts and other authors have emphasized, the ESRB rating system provides a less restrictive means of protecting kids from uncertain harm linked to violent video games. 128 In fact, Federal Trade Commission studies show that the ESRB voluntary rating system has improved over time in parent satisfaction and in ensuring that kids are buying age-appropriate video games. 129

This Article, however, is concerned with an issue broader than finding the least restrictive means of ensuring age-appropriate access to violent video games. The focus now turns to the scientific studies and the larger issues of what they show, how they are used, and what legitimacy they have in deciding First Amendment questions.

---

124 Id. at 241.
125 Id. at 258.
126 Id.
129 Wood, supra note 45, at 117–18.
III
REVIEWING THE LITERATURE THROUGH A SCIENTIFIC/MEDICAL PRISM

A. Violent Video Games Negatively Affect Children

There is published scientific evidence indicating at least a correlation, if not direct causation, between video game violence and violent or aggressive thoughts and behavior. These articles can be defined broadly as falling into three groups. The first group of articles studied general populations and found a correlation between playing violent video games and negative changes in thought content and behavior. The second group consists of studies that found a correlation between violent video games and vulnerable populations, such as teens with mental illness or preexisting personality problems. The third posits an indirect association based on studies that show positive video games lead to positive behaviors; therefore, the inverse would reasonably be expected.

An example of the first type of study found that adults who played a violent video game had an increase in “implicit aggressive self-concept.” Another study found similar results when comparing subjects who played either realistic violent, unrealistic violent, or nonviolent video games for forty-five minutes. The subjects who

131 See, e.g., id.
134 Matthias Bluemke et al., The Influence of Violent and Nonviolent Computer Games on Implicit Measures of Aggressiveness, 36 AGGRESSIVE BEHAV. 1, 1, 4 (2010) (comparing a group of adults who played a violent video game with the objective of shooting soldiers with a group of adults who played a video game with the objective of watering flowers). “Implicit aggressive self-concept” occurs when a person perceives aggression as part of his or her core identity, like a soldier or warrior might. See id. at 1–2.
135 Christopher P. Barlett & Christopher Rodeheffer, Effects of Realism on Extended Violent and Nonviolent Video Game Play on Aggressive Thoughts, Feelings, and Physiological Arousal, 35 AGGRESSIVE BEHAV. 213, 217, 223 (2009).
played realistic violent video games showed the greatest increase in aggressive feelings and physical arousal.136

The above studies show an increase in aggressive thought after playing a violent video game but do not indicate any long term effects or any indication that behavior significantly changes. A study by Bushman and Anderson attempted to document whether playing violent video games would show observable, real world differences.137 In their study, subjects played either a violent video game or a nonviolent video game; afterward, the subjects were exposed to a staged confrontation between two people.138 The subjects who played the violent video game were less likely to help those involved in the fight.139 In addition, the subjects exposed to the violent video game rated the fight as less serious and were less likely to hear the confrontation taking place.140 At the very least, this study seems to indicate a definable, real-world change in behavior related to playing violent video games.

There are published studies that find that certain populations are more likely to be at risk or more likely to want to play violent video games.141 For example, a study found that children with attention deficit disorder and preexisting personality traits were at a higher risk of showing addictive behavior with violent video games compared to children without these features.142

136 Id. at 222. Physiological arousal is usually a measure of heart rate changes, blood pressure changes, and other physiological changes that take place during the fight or flight response. See id. at 218.


138 Id. at 274–75.

139 Id. at 276.

140 Id.


142 See sources cited supra note 141. At-risk individuals are usually males who have some of the following traits: preexisting personality disorders, preexisting mental health problems, a difficult or traumatic upbringing, and poor self esteem. In the literature search done by Frölich and others, they determined that children with attention deficit disorder and preexisting personality traits were at a higher risk of showing addictive behavior with violent video games. Traditionally, the term addiction referred to substances that cause physiological and psychological dependence, but currently the term is increasingly applied to behaviors that parts of society may find distasteful, such as time on the Internet, sex, or video games. Cases exist where people with either a diagnosed mental condition or a shy
Some studies find a correlation or relationship between the amount of time a game is played and behavior. One study, based on parents’ self reports of their children’s video game playing behaviors, found that longer playing time correlated to troublesome behavior and poor academic outcomes.\textsuperscript{143} The same study also indicated that kids who played more educational games had more positive outcomes.\textsuperscript{144}

Although not as frequently studied, there is research on the effects of positive video games on individuals.\textsuperscript{145} One study found that subjects who played a pro-social video game were more likely to help after a mishap, assist in further experiments, and intervene in harassment situations.\textsuperscript{146} These findings were the opposite of what was found when measuring the same variables on subjects who played a violent video game.\textsuperscript{147} The same results were noted in a review of the literature of studies on the effects of pro-social games on multinational populations. These studies found that subjects playing pro-social games tended to engage in behaviors deemed more socially acceptable no matter the cultural context.\textsuperscript{148} The authors of these studies who reviewed the literature concluded that the same results seen across different methodologies, ages, and cultures provide robust evidence that pro-social game content could positively affect behavior. These studies support the notion that video games do affect individuals, as would be expected from general learning theories.

personality read books to the point where they socially isolate themselves and limit their functioning. However, the authors are not aware of anyone calling for Barnes & Noble self-help groups to fight this “addiction.” This may be a case, just like the Temperance movement, where the ethical and moral side of the debate influences and clouds the validity of scientific study and terminology.

\textsuperscript{143} Erin C. Hastings et al., \textit{Young Children’s Video/Computer Game Use: Relations with School Performance and Behavior}, 30 ISSUES MENTAL HEALTH NURSING 638, 644–45 (2009).

\textsuperscript{144} \textit{Id.}


\textsuperscript{146} Grettemeyer & Osswald, \textit{supra} note 133, at 214–17.

\textsuperscript{147} \textit{Id.} at 211–12.

\textsuperscript{148} Gentile et al., \textit{supra} note 145, at 755–61.
B. Violent Video Games Have No Negative Impact

Just as there are many articles suggesting a connection between violent video games and aggression, there are several articles that do not. In 2007, a meta-analysis study\(^{149}\) found that, after correcting for publication biases, there was no significant correlation between violent video games and aggressive behavior.\(^{150}\) An Iranian study found that individuals who were non-gamers or excessive gamers reported having lower self-reported mental health wellness than low-to-moderate gamers.\(^{151}\) This study suggests that the impact or correlation of playing violent video games is not a linear effect. Instead, it is a U-shaped effect where extremes indicate problems, but moderation indicates either a healthy individual or that games have mental health benefits. This finding is in line with some social theory, which suggests that video games, like sports, may provide an outlet for individuals to work through aggression and, therefore, have better mental functioning and overall lower aggression levels.\(^{152}\)

Additionally, there is literature that notes positive attributes to violent video game playing, such as improved visual-spatial coordination, peripheral attention, and reactive decision making.\(^{153}\) One study looking at multivariate risk factors for youth violence found that exposure to violent television or video games was not one of the many factors considered predictive of youth violence.\(^{154}\)

\(^{149}\) A meta-analysis is a study technique where information from multiple published studies addressing a research hypothesis is combined to increase the sample size and therefore increase the statistical power when looking for an effect. A meta-analysis can be a powerful tool but is subject to inclusion or sampling bias based on which studies or data are or are not included.


\(^{152}\) HELFGOTT, *supra* note 54, at 375.

\(^{153}\) Ferguson, *supra* note 150, at 314.

\(^{154}\) The many variables considered to be predictive of youth violence included delinquent peer influences, antisocial personality traits, depression, and parents or guardians who use psychological abuse in intimate relationships. Exposure to violent TV or video games and neighborhood quality were not predictive of youth violence. Christopher J. Ferguson et al., *A Multivariate Analysis of Youth Violence and Aggression: The Influence of Family, Peers, Depression, and Media Violence*, 155 J. Pediatrics 904, 904–08 (2009).
In an attempt to determine if playing violent video games causes measurable changes in human brains, a factor that may be critical in the Schwarzenegger case, researchers have used various imaging techniques to study brain activity of video game players. One study compared functional MRI (fMRI)\(^{155}\) brain studies of violent video game players with fMRIs from a control group to determine if the gamers had a change in brain imaging affecting their ability to distinguish between virtual violence and actual violence.\(^{156}\) The study found that “the ability to differentiate automatically between real and virtual violence has not been diminished by a long-term history of violent video game play, nor have gamers’ neural responses to real violence in particular been subject to desensitization processes.”\(^{157}\) This would indicate that, at least on a population basis, video games do not cause individuals to lose their grip on what is real versus what is fantasy. The study’s authors, however, correctly noted that results may show some variation when only one individual is considered.\(^{158}\)

Another study measured the physiological effects of violent video game playing by measuring levels of the stress hormone, cortisol.\(^{159}\) No increases in cortisol levels were detected in the saliva of those playing violent video games.\(^{160}\) This result is contrary to what might be expected if playing violent video games actually caused players to experience increased aggression, which is usually associated with increased physiological arousal.\(^{161}\)

A recent review of the literature studying the relationship between exposure to violent content in television and video games and behavioral problems in children found the literature to be confusing.

\(^{155}\) Functional magnetic resonance imaging (fMRI) is a specialized MRI scan that measures changes in blood flow related to neural activity in the brain.

\(^{156}\) Christina Regenbogen et al., The Neural Processing of Voluntary Completed, Real and Virtual Violent and Nonviolent Computer Game Scenarios Displaying Predefined Actions in Gamers and Nongamers, 5 SOC. NEUROSCIENCE 221, 221–40 (2010).

\(^{157}\) Id. at 221.

\(^{158}\) Id.


\(^{160}\) Id.

\(^{161}\) Id.
and contradictory. The authors found “significant methodological flaws” in every study they reviewed. Overall, the authors concluded that the state of the literature consisted of “insufficient, contradictory and methodologically flawed evidence on the association between television viewing and video game playing and aggression in children and young people with behavioural and emotional difficulties.” The authors warned that better studies were needed before true evidence-based public health policy could be developed.

C. Social Science Research: A Cautionary Note

In the context of legal fact finding, scientific studies and expert testimony must meet evidentiary standards of reliability. Those rules do not apply to state legislatures. Thus, the scientific studies and expert testimony that serve as the foundation for legislative findings are not filtered through rules of evidentiary reliability. Without well-articulated standards governing the reliability of studies that legislators rely upon and stringent, clear standards of review for courts to apply, social science research can appear to support a political agenda to suppress violent video games and other objectionable expression when the research in fact does not. Tensions exist between social science and the law; the perception, if not the reality, remains that social science research is “soft” as compared to medical and other forms of pure science. Given the fact that prediction of future acts is one of the hardest challenges in social science, the weight given to research showing a causal relationship between violent video games and harm should be held to a very high standard.

---

163 Id. at 5, 12–14.
164 Id. at 5.
165 Id.
Scientific literature exists supporting both sides of the debate on whether violent video games and other violent media have deleterious effects on individuals. However, one needs to separate the wheat from the chaff when using research as supporting evidence for making policy and legal decisions. Legislators and judges must ask if the study represents good science: are the results applicable to the real world, and were the results influenced by bias?

A 2010 search of scientific articles using the term “violent video games” returned ninety-two publications. This is by no means the totality of articles published on the topic, but it does represent the articles in the National Library of Medicine and National Institute of Health database. Just looking at the titles of the articles gives a reader an indication of the contradictory literature and confusion in the field. There is a wide range of disagreement among professionals, even about the same data. For example, the responses to one meta-analysis study ranged from Nailing the Coffin Shut on Doubts That Violent Video Games Stimulate Aggression to Much Ado About Nothing: The Misestimation and Overinterpretation of Violent Video Game Effects in Eastern and Western Nations.

As with most professional literature, the sheer volume of studies on either side cannot simply be numerically counted to determine the prevailing scientific belief. Not all studies are created equal, and therefore, not all studies ought to carry the same weight. In addition, some journals are more selective than others in the quality of work they publish. Statistics can be used to “massage” data, so studies

---


169 Id.

170 Craig A. Anderson et al., Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review, 136 PSYCHOL. BULL. 151 (2010) (providing an analysis of scientific data pooling smaller, previously published studies to create one large sample).

171 L. Rowell Huesmann, Nailing the Coffin Shut on Doubts That Violent Video Games Stimulate Aggression: Comment on Anderson et al., 136 PSYCHOL. BULL. 179 (2010).


must be looked at with a critical eye. Is the data being massaged to fit predetermined theories, or is it allowed to speak for itself? Is there a preconceived bias, such as unfairly discounting studies with different findings? Possible limitations to many of the studies regarding video games need to be taken into account when weighing the importance of a study: Was the study population too small? Were skewed or inappropriate populations sampled? Were clearly or appropriately defined ways to measure outcomes used? Was the threshold for defining a violent or aggressive outcome or thought either too high or too low? Had too many confounding factors not been controlled for, accounted for, or eliminated?\

The totality of the literature should be viewed in a context recognizing that there is a publication bias. Generally speaking, it is easier to publish a study when it shows an effect than when the study does not show an effect or is a null finding. Some journals, by their very title, are addressing a problem: Cyberpsychology and Behavior and Aggressive Behavior. This is especially true in

Two of the most contentious parts of the emails were the phrases “hide the decline” and “trick,” seen as evidence by skeptics of an attempt to massage data. This related to temperature data used in a graph for a 1999 World Meteorological Organization report. The inquiry found the figure supplied for the report was misleading because the scientists had not fully explained how some of the data had been used.


In one e-mail exchange, a scientist writes of using a statistical “trick” in a chart illustrating a recent sharp warming trend.

In a 1999 e-mail exchange about charts showing climate patterns over the last two millennia, Phil Jones, a longtime climate researcher at the East Anglia Climate Research Unit, said he had used a “trick” employed by another scientist, Michael Mann, to “hide the decline” in temperatures.

Id.


175 See Ferguson & Kilburn, Public Health Risks, supra note 174, at 762.

the earlier days of a topic’s study when null findings are often not published because, rightly or wrongly, the study is assumed to be flawed, does not add anything “new” to general knowledge and is therefore unworthy of publication, or is rejected because the study runs contrary to the editors’ or reviewers’ beliefs. This problem was recently highlighted in the environmental community when, based on leaked e-mails, it appeared that editors were intentionally limiting, if not outright blocking, the publication of articles that disagreed with their personal beliefs on climate change.178

In researching video games, enough time may not have passed to allow for the scientific literature to be fully vetted. Home video game consoles did not become common household items until the late 1970s or early 1980s. Video games of the type at issue were not marketed in large numbers until after the ESRB rating system went into effect in 1994. It was not until the late 1990s and early 2000s that video game consoles developed enough processing power to render realistic depictions of violence.

It takes many years for the scientific community to identify a problem and come to a consensus on it. Often, early studies are small and contain possible methodological errors or limitations, which are usually addressed in later, larger studies. Smaller studies are frequently done first because they are cheaper and necessary to justify


“This whole concept of, ‘We’re the experts, trust us,’ has clearly gone by the wayside with these e-mails,” said Judith Curry, a climate scientist at Georgia Institute of Technology.

She and other scientists are seeking more transparency in the way climate data is handled and in the methods used to analyze it. And they argue that scientists should re-evaluate the selection procedures used by some scientific journals . . . .

Revkin, supra.
the awarding of grants or funding from other sources for more
detailed and thorough study. Grants and other funding sources are
usually not given to further null-finding studies, unless controversy or
a political agenda exists. This again highlights a potential source of
pressure for researchers to have a positive finding, especially early in
a subject’s study. The study of violence in video games may have
had a methodological head start because earlier studies on comic
books, movies, television, and music laid a foundation. However, it
still takes time for a scientist to refine and improve the techniques
used for studying a new and different medium.

Many of the studies on which legislators based their legislative
findings to justify violent video game restrictions used the method of
meta-analysis. This method of study relies on previously published
studies, which are grouped together to increase the sample size and
show a more robust effect. The lack of publication of null finding
articles illustrates how meta-analysis studies can be skewed due to
publication bias (unknown data cannot be included), as well as author
inclusion or selection bias. Meta-analysis can be misrepresented by
proponents of a particular belief to indicate the definitive and
conclusive state of the literature because, after all, the meta-analysis
conclusions are based on the literature. Because meta-analyses are
susceptible to publication and selection bias, a critical reviewer needs
to ask himself if the meta-analysis report is a case of “garbage in
garbage out” or if it represents scientifically reliable results.

When the Supreme Court decides the Schwarzenegger case, it will
address whether a direct causal relationship between the violent video
games and asserted harm must be established. Many of the studies
relied on to support legislative findings show a correlation. However,
these studies do not prove causation. In unrelated medical research,
for example, studies have suggested that coffee consumption may be
linked to lung cancer. However, is it really the coffee or the
proverbial cigarette the individual smokes with the coffee that creates
a positive correlation between coffee and lung cancer? In the case of
video games, are the video games causing the child to be more
aggressive, are more aggressive children attracted to violent video
games, or is it a combination of the two? It is very difficult to
determine if there is a true cause and effect relationship due to the

---

179 Naping Tang et al., Coffee Consumption and Risk of Lung Cancer: A Meta-Analysis, 67 LUNG CANCER 17 (2010).
potential for multiple confounding factors. Where can researchers find a large group of children to study who have not watched TV, listened to popular music, played video games, been exposed to the Internet, or been exposed to violence? If that population of children does exist and could be studied, would that research be applicable to American children, who have been exposed to violence from multiple sources? Like the coffee example, there may be other unaccounted for confounders. For instance, children with less parental involvement may play more video games; so the causation might be due to the lack of supervision and not to the games, even though playing time is a positive correlating factor.

In the case of video games, there are two competing social theories: one theory posits that video games increase violence because children learn from them; the other theory views video games as a potential way to release aggression in a nondestructive manner. Unlike courts, legislators are not bound by legal rules governing admissibility of scientific evidence. The usual filters that theoretically screen out “biased” science in the courtroom are not present. Therefore, the social and moral underpinnings of social science research can be camouflaged by well-presented methodology and scientifically significant statistical data and relied upon to regulate violent video games or other politically unpopular expressive material.

D. First Amendment Standard of Review for Social Science Research

The dependence on social science evidence in legal decision making dates back to the turn of the twentieth century.180 Louis Brandeis is credited as the first lawyer to premise his legal argument on extensive research evidence.181 Representing the State of Oregon at the time, Louis Brandeis argued before the Supreme Court in Muller v. Oregon.182 The case involved a challenge to Oregon’s law limiting the workday of females working in factories and laundries to ten hours.183 Brandeis dedicated the majority of his brief to evidence supporting the link between health-related risks to women and their

180 Moenssens et al., supra note 167.
181 Id.
183 Id. at 416–19 (claiming that the law unconstitutionally limited female employees’ right to contract with employers).
His so-called social science research would not pass evidentiary muster today, but Brandeis opened the door to the marriage between social sciences and the law.  

Today, the areas of social science not only influence legal decision making but are intricately involved with the legislative branch in policy making and the criminal justice system. Despite the pervasive ties and interdependence between the law and social sciences, tensions exist. “[T]he disciplines of law and social science arise from very different intellectual traditions.” Lawyers deal with specifics; social scientists deal with generalities. Lawyers reason on a case-by-case basis; social scientists base conclusions on accumulated data. Social scientists make judgments based on probabilities; lawyers like certainty. Social scientists are trained to be objective observers of facts; lawyers are advocates, bolstering their case by tearing down the opponent’s case. Finally, lawyers stick to tradition and precedent; social scientists “value[] ever-changing empirical bases of knowledge.”

Given these differences in professional tradition and training, it is no wonder that social science research can be both misunderstood and misused in the world of legal advocacy. The rules of evidence provide a check on overzealous attorneys and a barrier to junk science reaching the trier of fact in a courtroom. However, what rules provide a check on legislators in their use of social science research to support legislation?

When social science research is the basis for legislative findings to support restrictions on protected speech, how much deference should the court give to those scientific studies? The Supreme Court has provided an answer: “Although we must accord deference to the predictive judgments of the legislature, our ‘obligation is to assure

184 MOENSSENS ET AL., supra note 167, at 1256.
185 Id. (“Ironically, while the brief was a landmark for the use of social science in law, the contents of ‘The Brandeis brief’ would not be accepted as social science evidence today, given that the research [statements from politicians and factory inspectors] was not empirical in nature.”).
186 Id. at 1259.
187 Id.
188 Id.
189 Id.
190 Id. at 1260.
191 Id. at 1259.
that, in formulating its judgments, [the legislature] has drawn reasonable inferences based on substantial evidence.”  

Substantial evidence is defined as “more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.” “Substantial evidence” relates to the quality of the evidence. In the context of violent video game litigation, do the studies provide real life, meaningful answers to the issue of cause and effect? Do they materially advance the proposition that violent video games cause harm? In part, the answer depends on how harm is defined.

In the First Amendment context, Supreme Court precedent demands the most exacting scrutiny to content-based restrictions. This requires the government to demonstrate with substantial evidence that the proposed regulation “will in fact alleviate [the alleged] harms in a direct and material way.” Does this require absolute certainty, beyond a reasonable doubt, or something less?

The Supreme Court is poised to answer some of these questions in the Schwarzenegger case. A content-based restriction is presumptively invalid. The Court has already said that the burden to overcome the presumption of invalidity is very high. But, how high is high? The demands of narrow tailoring and the doctrines of overbreadth and vagueness require rigor in the drafting of legislation. However, they do not relate directly to the reliability of the scientific evidence used to support the legislation. The “reasonable inferences based on substantial evidence” standard is not sufficiently


193 Consol. Edison Co. v. NLRB, 305 U.S. 197, 229 (1938); see also Century Commc’ns Corp. v. FCC, 835 F.2d 292, 304 (D.C. Cir. 1987) (“[W]hen trenching on first amendment interests, even incidentally, the government must be able to adduce either empirical support or at least sound reasoning on behalf of its measures.”).

194 See, e.g., Turner Broad. Sys., Inc., 512 U.S. at 642.

195 Id. at 666.

196 Id. at 664.

197 Not all courts were concerned about the sufficiency of scientific evidence. See Video Software Dealers Ass’n v. Maleng, 325 F. Supp. 2d 1180, 1190 (W.D. Wash. 2004) (acknowledging that the court could not give an advisory opinion but giving suggestions for the legislature to go back to the drawing board and draft a restriction that would not have the same infirmities as the one before the court); see also Calvert & Richards, supra note 22.
rigorous. It does not adequately protect the First Amendment from the whims of the political process or from advocacy groups and social scientists who advance their own moral convictions at the expense of expressive freedom. The Court should adopt a standard that is more rigorous than “reasonable inferences based on substantial evidence” and require that social science evidence be weighed under a clear and convincing evidence standard, at the very least.

Schwarzenegger provides the opportunity for the Court to articulate clear standards of application to social science research for both legislatures and courts in the context of First Amendment cases. The First Amendment itself prescribes the rigor with which legislatures and courts should scrutinize social science research when used to support legislation or review constitutional challenges. As Justice Roberts stated in Stevens, “The First Amendment itself reflects a judgment by the American people that the benefits of its restrictions on the Government outweigh the costs.”

Legislators may be well served by an articulated standard of reliability to apply to social science research when drafting legislation. However, legislators are accountable to constituents and are more concerned with politics than First Amendment principles. It is the job of the courts to “check” the political process from encroaching on First Amendment rights. “[A]s a general matter, ‘the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter, or its content.’”

Video games are purely the creation of imagination, no less deserving of First Amendment protection than movies, works of art, and literature. Some may bristle at their graphic violence, but as Judge Posner opined: “Violence has always been and remains a central interest of humankind and a recurrent, even obsessive theme of culture both high and low.” In the realm of ideas and protecting young minds, this is a matter of parenting, not government.

201 Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572, 577 (7th Cir. 2001).
CONCLUSION

The debate about the negative influences of media violence on children is not new. The current controversy on violent video games is déjà vu of legislative attempts to ban access and distribution of violent materials to children in the form of comic books over sixty years ago. Through testimony at congressional hearings and published research in professional journals, the social science community has provided the evidence for legislators and advocacy groups to politicize the problem of children’s exposure to media violence.

This term, the Supreme Court will consider the most recent legal challenge to violent video game restrictions in Schwarzenegger v. Entertainment Merchants Ass’n. The legal theories to defend violent video game restrictions have been novel and creative. However, these attempts to define violent video games as obscenity, subject to the Ginsberg variable obscenity standard, or to categorically exclude them from First Amendment protection because of their offensiveness and minimal social value will fail. If the Court’s most recent First Amendment cases on animal cruelty videos and corporate campaign expenditures are a bellwether of the Schwarzenegger decision, violent video games (and other depictions of violence) will receive the imprimatur of the Supreme Court as protected expression. As in United States v. Stevens, the Court will hold that California’s violent video game restriction is an unconstitutional content-based restriction, and the social science evidence to satisfy strict scrutiny review is insufficient.

After reviewing the social science research that has served as the basis for legislative findings to support violent video game restrictions, this Article discusses the weaknesses of that research. At this point in the debate on the effects of violent video games, social science research has limited value to aid in both public policy creation and legal decision making. Further, because of the limits of social science research, this Article posits that the standard to apply for deference to legislative findings in First Amendment cases should be very high and clearly articulated.

202 Stevens, 130 S. Ct. at 1580 (invalidating an animal cruelty statute because it was substantially overbroad and failed the narrow tailoring required under strict scrutiny).
The debate over how much violence is appropriate for children and whose role it is to decide will not end with the *Schwarzenegger* case. This controversy pits parents against government and courts against legislatures in deciding what limitations are appropriate and who imposes them. Further, parties on both sides of the debate will need the support of social science research to bolster their positions.

The past sixty years have seen the interplay between political pressure and voluntary industry standards. This system has worked well and, at the same time, preserved First Amendment protections. As technology advances, the cause and effect relationship between the virtual world and real world harm may change. For now, First Amendment protections demand that the line between fantasy and real life remain impenetrable. It will always be dangerous to falsely yell fire in a crowded theater, but the same cannot be said for the Internet (at least at this time).