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

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I. Introduction

II. The Power of Politicians, Advocacy Groups, and Social Science Research to Censor – The “Werther Effect”

III. First Amendment Obstacles to Banning Violent Video Games
   A. Applying Miller Obscenity Test and Ginsberg Variable Standard
   B. Creating a New Category of Unprotected Speech Post U.S. v. Stevens
   C. Content-Based Restriction and Meeting Strict Scrutiny

IV. Reviewing the Literature through a Scientific/Medical Prism
   A. Violent Video Games Negatively Affect Children
   B. Violent Video Games Have No Negative Impact
   C. Social Science Research: A Cautionary Note
   D. First Amendment Standard of Review for Social Science Research

V. Conclusion

I. Introduction

As kids 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.¹ The controversy on how much violence is appropriate and whose role it is to decide is not new. From Superman 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 community² to bolster their position. Ultimately, the Supreme Court decides where the line is drawn between protecting kids or society from uncertain harm and protecting the First Amendment.

Dating back to 1976, with the release of Death Race, violent video games became the target of this on-going debate.³ Among American teens, playing video games is almost a universal pastime⁴ and has fueled an industry worth $11.7 billion.⁵ Half of the


² The authors use the term “social sciences” to apply to research done by psychiatrists, psychologists, sociologists, etc., who are looking at effects on general populations, not necessarily individuals with medical conditions, such as schizophrenia. The “soft science” is distinguished from more traditional medical research.

³ Byrd, supra note 1 at 405-410 (detailing the history of the video game controversy).


⁵ Essential Facts about the Computer and Video Game Industry, ENTERTAINMENT SOFTWARE ASSOCIATION, www.theesa.com/facts/index.asp (the video game industry is worth $11.7 billion).
top selling video games contain some violence. Examples of the most objectionable violence in video games involve tearing victims in half, visiting prostitutes then beating them to death, shooting schoolgirls then 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 fast as the legislatures enact statutes to ban violent video games from minors, the courts strike them down.

Still, the pull and tug continues between legislators, with the aid of social science professionals, trying to limit access to violent video games and courts cloaking them with 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

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6 Do Violent Video Games Contribute to Youth Violence? http://www.videogames.procon.org/#ESA.
7 Brendon Sinclair, 10 Most Violent Games Named, November 28, 2005, http://videogamesyahoo.com/newarticle?eid=416427 (God of War included in Family Media Guide’s 10 most violent video game list; “Prisoners are burned alive and player can use ‘finishing moves’ to kill opponent, like tearing a victim in half”).
8 Sinclair, supra note 7 (Grand Theft Auto: San Andreas: “Player recovers his health by visiting prostitutes then recovers funds by beating them to death”).
10 Entertainment Software Assoc. v. Maleng, 325 F. Supp.2d 1180, 1188 (W.D. Wash. 2004) (quoting Judge Lasnik, 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 anti-social behavior in youths).
12 When there is overwhelming support for an action, the legislative process moves much faster than the judicial system. See American Music Machine Assoc. v. Kendrick, 244 F.3d 572 (7th Cir. 2001), cert. denied, 534 U.S. 994 (2001) (discussing the many federal cases that have held legislation restricting access to violent video games unconstitutional).
public places.\textsuperscript{13} Since then, most federal courts to review government restrictions on access or distribution of violent video games to minors have recognized the First Amendment protections afforded these video games.\textsuperscript{14} Although the courts did not always agree on the reasons for their holding, common themes emerged from these cases.\textsuperscript{15} First, no court was willing to recognize violence as a “new” category of unprotected speech or as synonymous with obscenity for First Amendment purposes.\textsuperscript{16}

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

\textsuperscript{14} See Kendrick, \textit{supra} note 12; Video Software Dealers v. Schwarzenegger, 556 F.3d 950 (9th Cir. 2009) (restrictions on sale and rentals of violent video games subject to strict scrutiny and “variable obscenity” standard from \textit{Ginsberg} does not apply); Entertainment Merchants Assoc., v. Henry, 2007 WL 2743097 (W.D. Okla., Sept. 17, 2007); Entertainment Software Assoc. v. Granholm, 426 F. Supp. 2d 646 (E.D. Mich. 2006) (violent video games protected by the First Amendment and no substantial evidence to show harm to children to sustain restriction under strict scrutiny review); Entertainment Software Assoc. v. Foti, 451 F. Supp. 2d 823 (M.D. La. 2006); Entertainment Software Assoc., v. Hatch, 443 F. Supp. 2d 1065 (D. Minn. 2006); Entertainment Software Assoc., v. Blagojevich, 404 F. Supp. 2d 1051 (N.D. Ill. 2005); Video Software Dealers Assoc., v. Maleng, 325 F. Supp. 2d 1180 (W.D. Wash. 2004); Wilson v. Midway Games, Inc., 198 F. Supp. 2d 167 (D. Conn. 2002); Sanders v. Acclaim Entertainment Inc., 188 F. Supp. 2d 1264 (D. Colo. 2002); Interactive Digital Software Assoc. v. St. Louis County, 329 F.3d 954 (8th Cir. 2003); James v. Media, Inc., 300 F.3d 683 (6th Cir. 2002) (tort claim against video game providers by victims of school shooting is unsustainable under state tort law and raises First Amendment concerns); Eclipse Enterprises, Inc., v. Gulotta, 134 F.3d 63 (2d Cir. 1997) (prohibiting sale of trading cards depicting heinous crimes and criminals based on alleged harm to minors is unconstitutional); Video Software Dealers Assoc., v. Webster, 968 F.2d 684 (8th Cir. 1992) (penalty for selling or renting violent videos to minors unconstitutional). A few district courts upheld the restriction or denied a plaintiffs’ motion for preliminary injunction; but, these decisions were reversed on appeal. Kendrick and Interactive Digital Software, \textit{supra}.

\textsuperscript{15} The reasons for invalidating these restrictions usually fell into one of the following three categories: 1) vagueness; 2) overbreadth; 3) less restrictive means available.

Unlike obscenity, these courts declined to apply the *Ginsberg* “variable standard” to restrictions on violent depictions to minors.\(^{17}\) Further, the evidence on the causal connection between violent video games and harm to children or to society was deemed insufficient to sustain these content-based restrictions.\(^{18}\) Finally, the courts determined that prohibiting the sale, rental or access of violent video games to minors was not the least restrictive means to achieve the asserted interest in protecting children.\(^{19}\)

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 Assoc.*\(^{20}\) a case involving statutory restrictions and labeling requirements on the sale or rental of violent video games to minors.\(^{21}\) Why the Court chose to hear this case at this time probably has more to do with politics than law.\(^{22}\) However, the Court will finally “weigh in” on those questions

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\(^{17}\) *v. Webster*, 968 F.2d 684 (8th Cir. 1992) (penalty for selling or renting violent videos to minors unconstitutional).

\(^{18}\) *Id.*

\(^{19}\) Content based restrictions of protected speech are subject to strict scrutiny. Denver Area Educational Telecommunications Consortium, Inc. v. F.C.C., 518 U.S. 727, 832 (1996). The government must show that the restriction is necessary and the least restrictive means to achieve the government’s asserted compelling interest(s). *Id.*

\(^{20}\) *Video Software Dealers v. Schwarzenegger*, 556 F.3d 950 (9th Cir. 2009), *cert. granted* 130 S. Ct. 2398 (U.S. Apr. 26, 2010) (No. 08-1448). The Court will hear and decide this case in its 2010-2011 term.

\(^{21}\) *Id.* (invalidating California Assembly Bill 1179 (A.B. 1179), codified at Cal. Civ. Code §§ 1746-1746.5, which imposed civil penalties up to $1,000 for selling or renting those video games labeled violent to minors).

\(^{22}\) See generally, Clay Calvert & Robert D. Richards, *Mediated Images of Violence and the First Amendment: From Video Games to the Evening News*, 57 Maine L. Rev. 91, 114-115 (2005) (discussing the politics behind repeated attempts to legislatively restrict violent video games despite consistent court rulings to the contrary). Calvert and Richards make the point that depictions on TV and other news reports of real life violence, such as dying soldiers in Iraq and terrorist attacks, are more detrimental to the health of children than video games and are not regulated. These authors seem to equate news reporting on government activities with video games in the context of First Amendment protections. Although Justice Roberts, in *Stevens*, said the First Amendment does not involve weighing benefits of the speech against its social value, *see supra* Part III.B., scholars and case law have recognized the penultimate First Amendment importance of information on government officials and their conduct to insure an informed electorate. *See*
which 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.  

With an eye toward a Supreme Court decision sometime next year, this paper 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 caused by violent video games. Part II will chronicle 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 III will address the First Amendment obstacles to imposing restrictions on violent video games. Part IV will review 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 paper is not meant to simply 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 First Amendment restrictions. Finally, this paper will end on a cautionary note,
concluding that politics and “soft science”\textsuperscript{24} should not dictate First Amendment jurisprudence, even for the laudable goal of protecting children.

**II. The Power of Politicians, Advocacy Groups, and Health Science Research to Censor – The “Werther Effect”**

The concern about the power of media to influence, to stir emotions, and to incite actions which 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 Werthers)* by Johann Wolfgang von Goethe was published.\textsuperscript{25} 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.\textsuperscript{26} The problem became so significant that the book was banned in many European countries to protect young, easily influenced adolescents.\textsuperscript{27} Two hundred years later, sociologist, David Phillips, coined the term “Werther effect.”\textsuperscript{28} 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.\textsuperscript{29}

\begin{footnotesize}
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\item \textsuperscript{24} *In Praise of Soft Science*, NATURE, June 23, 2005 at 435(745), 1003 (discussing 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 rigor.”)
\item \textsuperscript{25} J. Pirkis & RW Blood, *Suicide and the Media. Part II: Portrayl in Fictional Media*, CRISIS, 2001 at 22(4), 155-62
\item \textsuperscript{26} H. Steinberg, *The “Werther Effect”: Historical Origin and Background of a Phenomenon*, PSYCHIATRISCHE PRAXIS, Jan. 1999, at 26(1), 37-42.
\item \textsuperscript{28} Id.
\item \textsuperscript{29} Steinberg, *supra* note 26.
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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 alcohol. By the late 1880’s, 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 passage 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 which some segments of society view as harmful to the morals and well-being of minors. The comic books debate in the 1940’s and 50’s eerily mirror 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

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30 Dr. Benjamin Rush, *Father of American Psychiatry*, PENN MEDICINE, http://www.uphs.upenn.edu/paharc/features/brush.html. (Benjamin Rush is represented in profile as part of the American Psychiatric Association’s logo; as well as being a historical physician, he was one of the 56 original signers of the Declaration of Independence).


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 to drink (the 21st Amendment repealed the 18th 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 (rational basis). 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).
Amendment, politicians were not deterred from investigating the alleged “bad effects” of comics. In 1954, the U.S. Senate Committee on 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. Objectors to those comic books feared a decline in morals, an increase in violence, and an increase in general lawlessness and disrespect.

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 and The Psychopathology of Comic Books. Many of these authors 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. One of the leading

37 Menand, supra note 36.
38 “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.” Senate Subcommittee Hearings into Juvenile Delinquency, with the special focus on Comic Books, S. Res. 89 and S. Res. 190, A Part of the Investigation of Juvenile Delinquency in the United States, 83d Cong. (1954) (statement of Dr. Fredric Wertham, author of Seduction of the Innocent).
41 Subcommittee Hearings, supra note 38.

Dr. Wertham: “I may say here on this subject there is practically no controversy. Anybody who has studied [comic books] and seen them knows that some of them have bad effects. Mr. Chairman, as long as the crime comic books industry exists in its present form 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?”
crusaders warned that “as long as the crime comic books industry exists in its present form, there are no secure homes.” As a result of the Senate hearings, the comic book industry implemented the Comics Code Authority standards, which are voluntary.

Even as recently as 2002, an article entitled *Violent Comic Books and Judgments of Relational Aggression* published findings that “social information processing of relationally aggressive situations is influenced by comic books, even if the comic books do not contain themes of relational aggression.” In laymen 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

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. . . that 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.”

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. . . What has been their experience with the reflection, or the result of that law upon juvenile delinquency? When was the law passed first?”

Dr. Wertham: “I am not quite sure. Maybe 1951. The information I have is based on the present official report of these debates on April 1 and 2. I judge from that that the law didn't work; that they made a list of crime comic books and they didn't know how to supervise it, in fact, they couldn't, and I doubt it can be done in that form. They have more bad crime-comic books than they ever had. They never could get them off the stand. The latest proposal on the 2d of April that I have is that they want to put the crime comic-book publishers in jail…”

Dr. Wertham: “Mr. Chairman, I am just a doctor. I can't tell what the remedy is. I can only say that in my opinion this is a public-health problem. I think it ought to be possible to determine once and for all what is in these comic books and I think it ought to be possible to keep the children under 15 from seeing them displayed to them and preventing these being sold directly to children. . .”

Dr. Wertham: “The judgment that these comic books have an effect on children, that is not the children's judgment. They don't think that. The children don't say that this does them any harm, and that is an interesting thing because it has been so misrepresented by the comic-book industry and their spokesmen in all the biased opinions that they peddle and that they hand out to unsuspecting newspaper editors.”

42 Subcommittee Hearings, *supra* note 38.
43 Menand, *supra* note 36.
the 1990’s, is of recent vintage,\textsuperscript{45} Congress held its first hearings on TV violence in 1952.\textsuperscript{46} 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.\textsuperscript{47} 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 to preempt government censorship.\textsuperscript{48}

The music industry received high profile attention in the 1980’s. Tipper Gore and the Parents’ Music Resource Center led a campaign for government mandated content labeling of music.\textsuperscript{49} The movement’s work resulted in congressional hearings in 1985, where many musicians testified about fears of censorship.\textsuperscript{50} Again, to preempt government censorship, the music industry instituted a voluntary rating and labeling policy.\textsuperscript{51} The video game industry followed suit. In 1994, the Entertainment Software Rating Board (ESRB) established its own voluntary rating system for video games.\textsuperscript{52} It is


\textsuperscript{46} Id. (citing Federal Communication Commission, MB Docket No. 04-261, Release No. FCC 07-50, \textit{In the Matter of Violent Programming and Its Impact on Children}, 22 FCC Record 7929, 7963 (adopted Apr. 6, 2007) (available at http://www.ftc.gov./bcp/online/edcams/ratings/reports.htm) (“the first congressional hearings were held in 1952 to examine the issue of violent programming.”)).

\textsuperscript{47} Freedman v. Maryland, 380 U.S. 51 (1965) (unanimously holding that the procedural scheme of the Maryland motion picture censorship statute failed to provide for adequate safeguards against undue inhibition of protected expression since (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).


\textsuperscript{50} The Motion Picture Association of America, \textit{supra} note 48.

\textsuperscript{51} Id.

\textsuperscript{52} The Entertainment Software Rating Board “ESRB” adopted the following system: “EC” for early childhood, age 3 and above; “E” for everyone age 6 and above; “E+” for everyone age 10 and above; “T”
no coincidence that the ESRB developed its voluntary rating system after Congress passed the Video Game Rating Act of 1994.\textsuperscript{53}

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

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\textsuperscript{53} Video Game Rating Act of 1994, S. 1823, 103d Cong. (1994); Video Game Rating Act of 1994, H.R. 3785, 103d Cong. (1994) (suggesting the establishment of an Interactive Entertainment Rating Commission to enforce a ratings system that would inform consumers on age-appropriate content).


\textsuperscript{55} Julie Wolf, \textit{John Hinkley, Jr.}, PBS PEOPLE & EVENTS (discussing \textit{Taxi} movie, with Jodie Foster, influenced John Hinkley, Jr. in his shooting of President Reagan; he saw the movie 15 times), http://www.pbs.org/wgbh/amex/reagan/peopleevents/pandeo2.html. For another example of "blaming" crime on a movie, see Olivia N. v. National Broadcasting Co., 126 Cal.App.3d 488 (1982) (claiming movie \textit{Born Innocent}, which aired on NBC, influenced juveniles to allegedly perpetrate an "artificial rape’ with a bottle on plaintiff).

\textsuperscript{56} “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 to 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." \textit{The Influence of the Beatles on Charles Manson}, http://www.law.umkc.edu/faculty/projects/ftrials/manson/mansonbeatles.html.

\textsuperscript{57} See, e.g., James v. Meow Media, 300 F.3d 683 (6th Cir. 2002) (affirming dismissal of tort action brought by victims of high school shooting in Pekin, Kentucky, claiming violent video games, movies, and internet sites desensitized Michael Carneal, the shooter, to violence and caused him to kill the students); Sanders v. Acclaim Entertainment, Inc., 188 F.Supp.2d 1264 (D. Colo. 2002)(video game and movie producers and distributors owed no duty of care to shooting spree victim who was shot and killed by two students after students allegedly viewed violent materials produced or distributed by defendants); Watters v. TSR, Inc., 904 F.2d 378 (6th Cir. 1990) (mother of teenage boy who played Dungeons and Dragons game had no claim against game manufacturer for son's suicide).
which fill headline news and saturate 24-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.

III. First Amendment Obstacles to Banning Violent Video Games

Litigation over kids’ access to violent videos has spanned well over a decade.¹⁵⁸
Over this time, legislators have become more sophisticated in drafting legislation,
learning from the constitutional defects of other jurisdictions’ legislative attempts.¹⁵⁹
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.”¹⁶⁰

A. Applying Miller Obscenity Test and Ginsberg Variable Standard

Every First Amendment challenge begins with the query: “does the restriction
target speech or non-expressive conduct?”¹⁶¹ The Schwarzenegger case will provide the
opportunity for the Supreme Court to definitively answer this question as it relates to
video games.¹⁶² However, “the notion that video games are protected free speech . . . is

¹⁵⁸ Video Software Dealers Assoc. v. Webster, 968 F.2d 684 (8th Cir. 1992) (striking down a Missouri
statute prohibiting the sale or rental to minors of violent videos and requiring stores to display or maintain
those videos in separate areas).
¹⁵⁹ See Video Software Dealers Assoc. v. Schwarzenegger, 556 F.3d 950, 957 (9th Cir. 2009), cert. granted
130 S. Ct. 2398 (U.S. Apr. 26, 2010) (No. 08-1448) (discussing the California statute and the reason
legislators included certain provisions “with the express goal of avoiding the constitutional pitfalls
indentified in Video Software Dealers Assoc. v. Maleng.”) (citation omitted).
¹⁶⁰ Id. at 961 (“At oral argument, the State confirmed that it is asking us to boldly go where no court has
gone before.”).
¹⁶¹ Id. at 961 (“At oral argument, the State confirmed that it is asking us to boldly go where no court has
gone before.”).
¹⁶² Conduct is not subject to First Amendment protection unless it qualifies as “expressive” conduct, such as
flag burning or nude dancing. See Texas v. Johnson, 491 U.S. 397 (1989)(holding that Johnson’s
conviction for burning American flag violates the First Amendment); Barnes v. Glen Theatre, Inc., 501
U.S. 560 (1991)(holding that nude dancing was expressive conduct protected by the First Amendment).
¹⁶³ Schwarzenegger, supra note 23 (questions presented).
becoming widely adopted in Circuit Courts around the United States.”  For the Supreme

Court to hold contrary to the four circuit courts 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 are 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 reasoned 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, [trying] to

squeeze the provision on violent [video games] into the 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


Schwarzenegger, 956 F.3d 950 (9th Cir. 2009); Interactive Digital Software Ass’n v. St. Louis, 329 F.3d

958 (8th Cir. 2003); James v. Meow Media, Inc., 300 F.3d 683 (6th Cir. 2002); Kendrick, 244 F.3d 572

(7th Cir. 2001).

64 Id.

65 Schwarzenegger, 556 F.3d 950, 957 n. 11 (citing Joseph Burstyn, Inc. v. Wilson, 343 U.S. 495, 501-502

(1952) (“movies are protected expression notwithstanding their ability to entertain as well as inform”)).

66 Granholm, 426 F. Supp.2d at 651.

67 Id.

68 See generally Schwarzenegger, 556 F.3d 950; Granholm, 426 F.Supp.2d 646; Kendrick,244 F.3d 572;

Interactive Digital Software, 329 F.3d 958; Meow Media, 300 F.3d 683.

69 Kendrick, 244 F.3d at 574.

70 This statement presupposes that such regulation satisfies the Miller test. See California v. Miller, 413

U.S. 15 (1973) (requiring 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 value). The regulation at issue in Schwarzenegger tracks the Miller
definition for obscenity, but applies the variable standard for minors, articulated in Ginsberg. See Schwarzenegger,
556 F.3d at 960.
one of those “well-defined and narrowly limited classes of speech, the prevention and 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 to kids, when those same videos 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 posed to articulate a “variable obscenity/violence” standard for kids, then “theoretically” under *Ginsberg*, restrictions would be upheld so long as it is “rational” for the legislature to find violent video games might be harmful to kids.

Lawmakers have not rested on “common sense” about the dangers of violent video games to restrict their access to 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 position. 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 the violent video games and harm to children. What

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72 390 U.S. 629 (1968) (upholding New York statute that prohibited the sale of “girlie” magazines and other such materials to kids, even though these materials would not be prohibited for adults).
74 *Id.* at 639.
75 Kendrick, 244 F.3d at 579 (“*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 lack of proof in *Ginsberg* about the harm to kids and girlie magazines from the violent video games restriction, which required social science evidence).
level of causation is sufficient to justify restrictions will soon be decided by the Supreme Court. 77

Courts have steadfastly refused to apply a variable obscenity standard to violent video games. In striking 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.” 78 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.” 79

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. 80 The city tried to characterize the proscribed expression as low value speech and “enough like obscenity” that it may be prohibited. 81 But, the court rejected the city’s argument. 82 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 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. 83 “In the context of the First Amendment, the word

77 Scharzenegger, 556 F.3d 950 (referring to second question presented to be argued in the Schwarzenegger case).
78 Kendrick, 244 F.3d at 578.
80 American Booksellers Assoc. v. Hudnut, 771 F.2d 323 (7th Cir. 1985).
81 Id. at 331.
82 Id.
83 Maleng, 325 F. Supp.2d at 1180 (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.”)
“obscenity” means material that deals with sex.”

Unable to “pigeonhole” violence in the category of obscenity, there have been a few “feeble” attempts to argue that violent video games belong in another category of unprotected speech, as defined in Brandenburg v. Ohio. Brandenburg established the category of unlawful advocacy, which is speech inciting unlawful activity that is both imminent and likely to occur. The connection between Brandenburg 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. Since there is little evidence linking violent video games to future criminal activity, the courts rejected the characterization of violent video games as unprotected speech which incites and is likely to produce imminent criminal activity.

B. Creating a New Category of Unprotected Speech Post U.S. 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.” These categories of unprotected speech have a long history and tradition. The content areas which fall outside the umbrella of First Amendment protection include obscenity, defamation, fraud,

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85 See Schwarzenegger, 556 F.3d at 961 n. 15 (discussing district courts’ rejection of arguments that because violent video games are alleged to cause violent, aggressive, and antisocial behavior, they belong to the category of unprotected incitement; the courts rejected this argument because even if there’s 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).
86 Brandenburg v. Ohio, 395 U.S. 444 (1969) (advocacy which “is directed to inciting or producing imminent lawless action and is likely to incite or produce such action” is not protected).
87 Id.
88 Id.
89 Id.
speech integral to criminal activity, incitement, and child pornography.\textsuperscript{92} The premise of “carving out” islands of unprotected speech was first articulated in \textit{Chaplinsky v. New Hampshire}.\textsuperscript{93} 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.”\textsuperscript{94} The \textit{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 \textit{United States v. Stevens}.\textsuperscript{95}

In \textit{Stevens}, the Court reversed the conviction of a man charged with selling videos of dog fighting in violation of a federal statute.\textsuperscript{96} Enacted primarily to target “crush videos,”\textsuperscript{97} the relevant statute criminalized “the commercial creation, sale, or possession of certain depictions of animal cruelty.”\textsuperscript{98} The Court held that the statute was a content-based regulation of protected speech that was substantially overbroad and facially unconstitutional.\textsuperscript{99}

\textsuperscript{92} Stevens, 130 S.Ct. 1577 (2010) (citations omitted) (listing the categories of unprotected speech which are based in history and tradition and are well-known to the bar). Usually “fighting words” is included in the categories of unprotected speech. However, since 1942, when the fighting words doctrine was first articulated, it has never been successfully applied in a case. \textit{See Chaplinsky}, 315 U.S. 568 (1942).
\textsuperscript{93} 315 U.S. 538 (1942).
\textsuperscript{94} \textit{Id.} at 572.
\textsuperscript{95} 130 S.Ct. 1577 (2010) (unwilling to create a category of unprotected speech for depictions of animal cruelty based on a “ad hoc balancing of relative social costs and benefits”).
\textsuperscript{96} \textit{Id.}
\textsuperscript{97} \textit{Id.} (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”).
\textsuperscript{98} \textit{Id.} (describing 18 U.S.C. § 48, which the Court held was a facially unconstitutional content based regulation of protected speech and substantially overbroad).
\textsuperscript{99} Stevens, 130 S.Ct. 1577.
Instead of arguing that its content based regulation satisfies strict scrutiny,\textsuperscript{100} the
government advocated for a categorical exclusion from First Amendment protection.\textsuperscript{101} The
government argued that depictions of animals being abused have such slight social
value as to be unworthy of First Amendment protection.\textsuperscript{102} 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.\textsuperscript{103}

As in the violent video game cases, the government invoked the \textit{Miller} definition
for obscenity to support its argument that the animal videos are undeserving of First
Amendment protection. The government considered the third prong of the \textit{Miller}
obscenity definition, which requires an inquiry as to whether the material has “serious
literary, artistic, political, or scientific value.”\textsuperscript{104} Applying the third prong of the
obscenity definition, the government argued that since the animal videos lack “serious
value,” they are not protected by the First Amendment.\textsuperscript{105}

The majority opinion in \textit{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

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\textsuperscript{100} Content-based speech regulations must satisfy strict scrutiny and are presumptively invalid. See 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 governmental interest. See Sable Communications of Cal.,

\textsuperscript{101} Stevens, 130 S.Ct. 1577.

\textsuperscript{102} \textit{Id}.

\textsuperscript{103} Stevens, 130 S.Ct. 1577.

\textsuperscript{104} \textit{Id.} (referring to the third prong of the obscenity test articulated in \textit{Miller v. California}, 413 U.S. 15
(1973)).

\textsuperscript{105} \textit{Id}.
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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 depend upon weighing the “value of the speech against its societal costs,” stating that such a “test for First Amendment coverage [ ] is startling and dangerous.”

Finally, any categorical exclusion for speech must be rooted in history and “linked to the crime from which it came.” 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 and which continues to be “an illegal activity throughout the Nation.” 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. 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.

106 Id.
107 Id.
108 Stevens, 130 S.Ct. at 1585.
109 Id. (citing Ashcroft v. Free Speech Coalition, 535 U.S 234, 249-250 (2002) (distinguishing depictions of animal cruelty from child pornography and referring to First Amendment protected virtual child pornography, which does not involve the use of actual children in its production)).
110 Id.
111 Id.
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 Stevens, offensiveness and lacking social value are not benchmarks for First Amendment protection.

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 video games, which target their violent content, are subject to strict scrutiny.\textsuperscript{112} Content based restrictions are “presumptively invalid;” the government must prove that the restriction “is necessary to further a compelling state interest.”\textsuperscript{113} This was the obstacle that 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. Rather it must demonstrate that the cited harms are real, not merely conjectural, and that the regulation will in fact alleviate these harms in a direct and material way.”\textsuperscript{114} 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.\textsuperscript{115} The legal debate surrounding violent video game restrictions focuses on the

\textsuperscript{113} Id. at 382.
\textsuperscript{114} Turner Broadcasting System v. F.C.C., 512 U.S. 622 (1994).
\textsuperscript{115} 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 can not be overinclusive nor underinclusive. See U.S. v. National Treasury Employees 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 –
amount and the strength of evidence necessary for the government to satisfy its burden.\textsuperscript{116} 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.\textsuperscript{117}

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 games debate is presented below. However, the point illustrates that legislators responded to the 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.

Several courts analogized violent video games to virtual child pornography. The Supreme Court held that restrictions on virtual child pornography violated the First Amendment.\textsuperscript{118} Unlike actual child pornography that causes harm to real children, virtual child pornography is produced using computer animation or adults who look like children.\textsuperscript{119} Since 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. Where no harm could be established, the Court held that the

\textsuperscript{116} Schwarzenegger, 556 F.3d 950.
\textsuperscript{117} Id.
\textsuperscript{118} Ashcroft, 535 U.S. 234.
\textsuperscript{119} Id.
content based restriction against virtual child pornography was facially unconstitutional.\textsuperscript{120}

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 show why lesser restrictive means are not effective.\textsuperscript{121} 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.\textsuperscript{122} In fact, FTC studies show that the ESRB voluntary rating system has improved over time in parent satisfaction and ensuring that kids are buying age-appropriate videos.\textsuperscript{123}

This paper, however, is concerned with a broader issue 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.

\section*{IV. Reviewing the Literature through a Scientific/Medical Prism}

\subsection*{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/aggressive thoughts and/or behavior.\textsuperscript{124} These articles can be defined broadly as falling into three groups. The first

\begin{footnotesize}
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  \item \textsuperscript{120} \textit{Id.}
  \item \textsuperscript{121} Ashcroft v. American Civil Liberties Union, 535 U.S. 564 (2002).
  \item \textsuperscript{122} Kenyota, \textit{supra} note 1; Byrd, \textit{supra} note 1; Phillips, \textit{supra} note 1; Johnson, 491 U.S. 937; Barnes, 501 U.S. 560.
  \item \textsuperscript{124} C.A. Anderson & B.J. Bushman, \textit{Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of}
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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 find a correlation in vulnerable populations, such as teens with mental illness or pre-existing personality problems. The third posits an indirect association based on studies which 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 individuals who played either realistic violent, unrealistic violent, or nonviolent video games for 45 minutes. The people who played realistic violent video games showed the greatest increase in aggressive feelings and physical arousal.

The above studies showed 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 effects.

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126 M. Bluemke, M. Friedrich & J. Zumbach, The Influence of Violent and Nonviolent Computer Games on Implicit Measures of Aggressiveness, Aggressive Behavior, Feb. 2010 at 36(1), 1-13. Id. “Implicit aggressive self-concept” is when one perceives aggression as part of their core identity; like a solider or warrior might. Adults playing violent video games with the objective of shooting soldiers for five minutes were compared to a group playing a video game with the objective of watering flowers.
128 Physiological arousal is usually a measure of heart rate changes, blood pressure changes, and/or other physiological changes which take place during the fright or flight responses.
differences. In their study, participants either played a violent video game or watched a violent movie; afterwards, the participants were exposed to a staged confrontation between two people. The people who watched a violent movie or played a violent video game were less likely to help those involved in the fight. In addition, the group exposed to the violent video game rated the fight as less serious, and were less likely to “hear” the confrontation taking place. These results indicated that violent video games had a greater effect than watching a violent movie. At the very least, this study would seem to indicate a definable and real world change in behavior related to playing violent video game.

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

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 child’s

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131 Id. At risk individuals are usually males that have some of the following traits: pre-existing personality disorders, pre-existing mental health problems, difficult or traumatic up-bringing, and poor self esteem. In the literature search done by Frölich and others, they determined that children with attention deficit disorder and pre-existing personality traits were at a higher risk of showing “addictive” behavior with violent video games. Traditionally, the term addiction referred to substances that cause physiologic and psychologic dependence, but currently the term is beginning to be applied to behaviors which 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 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 and Noble self help groups. This may be a case, just like the Temperance movement, where the ethical and moral side of the debate influence and cloud the validity of scientific study/terminology.
video game playing behaviors, found that longer playing time correlated to troublesome behavior and poor academic outcomes. The same study also indicated that kids who played more educational games had more positive outcomes.

Although not as frequently studied, there is research on the effects of positive video games on individuals. One study found that participants who played a pro-social video game were more likely to help after a mishap, were more willing to assist in further experiments, and intervened more in a harassment situation. These findings were the opposite of what was found when measuring the same variables on participants who played a violent video game. 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 participants playing pro-social games tended to engage in behaviors deemed more socially acceptable no matter the cultural context. The authors, 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.

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 which do not. In 2007, a meta-analysis

133 Id.
136 Id.
137 Gentile, supra note 134.
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. 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.

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. 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 variables considered predictive factors for youth violence.

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 brain studies of violent video game players

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138 A Meta-analysis is a study technique where information from multiple published studies that address 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/sampling bias based on what studies/data are or are not included.


141 Helfgott, supra note 54 at 367-415.

142 The Good, the Bad and the Ugly, supra note 148.

with MRIs 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.\textsuperscript{144} 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.”\textsuperscript{145} This would indicate that, at least on a population basis, video games do not cause individuals to “loose their grip” on what is real versus what is fantasy. The study’s authors, however, correctly noted that results may show some variation when just one individual is considered.\textsuperscript{146}

Another study measured the physiological effects of violent video game playing by measuring levels of the stress hormone cortisol.\textsuperscript{147} No increases in cortisol levels were detected in the saliva of those playing violent video games. 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 physiologic arousal.\textsuperscript{148}

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 confused and contradicting.\textsuperscript{149} The authors found “significant

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\item Id.
\item Id.
\item Id.
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methodological flaws” in every study they reviewed.\textsuperscript{150} 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 behavioral and emotional difficulties.”\textsuperscript{151} The authors warned that better studies were needed before true evidence-based public health policy could be developed.\textsuperscript{152}

\section*{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.\textsuperscript{153} Those rules do not apply to legislatures. Thus, the scientific studies and expert testimony, which serve as the foundation for legislative findings, are not filtered through rules of evidentiary reliability. Without well-articulated standards governing the reliability of the studies legislators rely upon and stringent, clear standards of review for courts to apply, social science research can support a political agenda to suppress violent video games and other objectionable expression. Tensions exist between social science and the law; and the perception, if not the reality, remains that social science research is “soft” as compared to medical and other forms of pure science.\textsuperscript{154} Given the fact that the prediction of future acts is one of the hardest challenges in social science, the weight given to the research showing a causal relationship between violent video games and harm should be held to a very high standard.

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\textsuperscript{150} \textit{Id.} \\
\textsuperscript{151} Mitrofan, \textit{supra} note 149. \\
\textsuperscript{152} \textit{Id.} \\
\textsuperscript{153} \textit{See} Daubert v. Merrell Dow Pharmaceuticals, 509 U.S. 579 (1993) (interpreting FRE 702 for admissibility of expert testimony, abandoning the previous \textit{Frye} “general accepted” test and establishing a new admissibility principle for federal cases). \\
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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 the 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 game” returned 92 publications. This is by no means the totality of the 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 is 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 Misestimating and Over Interpretation 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

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155 PubMed comprises more than 19 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites. PUBMED, http://www.ncbi.nlm.nih.gov/pubmed.
156 Id.
158 L.R. Huesmann, Nailing the Coffin Shut on Doubts that Violent Video Games Stimulate Aggression: Comment on Anderson et al. (2010), PSYCHOLOGICAL BULLETIN, Mar. 2010 at 136(2), 179-81.
all studies are created equal and, therefore, not all studies 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 “message” data;\textsuperscript{160} so studies 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; such as, is 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/aggressive outcome or thought either too high or too low; or had too many confounding factors not been controlled for, accounted for, or eliminated?\textsuperscript{161}

The totality of the literature should be viewed in a context recognizing that there is a publication bias.\textsuperscript{162} Generally speaking, it is easier to get a study published which shows an effect than to get a study published which does not show an effect or is a “null finding.” Some journals, by their very title, are addressing a problem: \textit{Cyberpsychology}

\textsuperscript{160} “In one e-mail exchange, a scientist writes of using a statistical “trick” in a chart illustrating a recent sharp warming trend...In 1999 e-mail exchange about charts showing climate patterns over the last two millenniums, 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.” Andrew C. Revkin, \textit{Hacked E-Mail is New Fodder for Climate Dispute}, NEW YORK TIMES, November 20, 2009. “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. David Fogarty, \textit{Climate Scientists Praise Report on Hacked Email Scandal}, REUTERS, July 8, 2010, http://www.reuters.com/article/idUSTRE6671D120100708.


\textsuperscript{162} \textit{The Public Health Risks of Media Violence}, supra note 161.
and Behaviour'\textsuperscript{163} and Aggressive Behavior.\textsuperscript{164} This is especially true in the earlier days of a subject’s study where 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 therefore unworthy of publication, or 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 which disagreed with their personal beliefs on climate change.\textsuperscript{165}

In researching video games, there many not have been enough time and length of controversy to allow for the scientific literature to be fully vetted. Home video game consoles did not become common household items until the late 1970’s to early 1980’s. 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 1990’s and early

\textsuperscript{163} \textsc{Cyberpsychology and Behaviour}, http://journalseek.net/cgi-bin/journalseek/journalsearch.cgi?field=issn&query=1094-9313 “This BiMonthly peer-reviewed journal explores the impact of the Internet, Multi-Media and Virtual Reality on behavior and society. Must reading for psychologists, psychiatrists, sociologists, educators, computer scientists, business executives and opinion-makers interested in the effects of interactive technologies.” The title of the journal changed; it is now \textsc{Cyberpsychology, Behavior, and Social Networking}, http://www.liebertpub.com/products/product.aspx?pid=10.

\textsuperscript{164} \textsc{Aggressive Behavior} will consider manuscripts in the English language concerning the fields of Animal Behavior, Anthropology, Ethology, Psychiatry, Psychobiology, Psychology, and Sociology which relate to either overt or implied conflict behaviors. Papers concerning mechanisms underlying or influencing behaviors generally regarded as aggressive and the physiological and/or behavioral consequences of being subject to such behaviors will fall within the scope of the journal. Review articles will be considered as well as empirical and theoretical articles. \textsc{Cyberpsychology and Behavior}, http://journalseek.net/cgi-bin/journalseek/journalsearch.cgi?field=issn&query=0096-140X.

\textsuperscript{165} Keith Johnson, \textit{Climate Emails Stoke Debate: Scientists’ Leaked Correspondence Illustrates Bitter Feud Over Global Warming}, \textsc{The Wall Street Journal}, Nov. 23, 2009, A3, http://www.online.wsj.com/article/NA/_WSJ_PUB:SB12588305294859215.html. “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 scientist should re-evaluate the selection procedures used by some scientific journals.” Andrew C. Revkin, \textit{Hacked E-Mail Data Prompts Calls for Changes in Climate Research}, \textsc{New York Times}, Nov. 27, 2007.
2000’s 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 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” since 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 which legislators based their legislative findings on 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 sizes 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/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. Since 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 hears 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.\(^{166}\) 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 potential 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 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 correlation is not due to the games, but the lack of supervision, 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. Louis Brandeis is credited to be the first lawyer to premise his legal argument on extensive research evidence. Representing the State of Oregon at the time, Louis Brandeis argued before the Supreme Court in Muller v. Oregon. The case involved a challenge to Oregon’s law limiting the workday of females, working in factories and laundries, to 10 hours. Brandeis dedicated the majority of his brief to evidence supporting the link between health-related risks to women and their children and overworking. His so-called social science research

168 Moenssens, supra note 167.
170 Id. (those challenging the law claimed that it unconstitutionally limited employees’ and employers’ right to contract).
171 Moenssens, supra note 167 at 1256.
would not pass evidentiary muster today;\textsuperscript{172} 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; they 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 exit. “The disciplines of law and social science arise from very different intellectual traditions.”\textsuperscript{173} 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.”\textsuperscript{174}

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 Court has provided an answer: “Although we must accord

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\textsuperscript{172} \textit{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”).
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\textsuperscript{173} \textit{Id.} at 1259.
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\textsuperscript{174} Moenssens, \textit{supra} note 167 at 1259 (discussion of the difference between social science and the law).
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deference to the predictive judgments of the legislature, our ‘obligation is to assure 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 the 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 the 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 posed 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 the legislation. However, they
do not relate directly to the reliability of the scientific evidence used to support the

175 Schwarzenegger, 556 F.3d at 962 (citing Turner Broad. Sys., Inc. v. FCC, 520 U.S. 180, 195 (1997)).
176 Richardson v. Perales, 402 U.S. 389, 401 (1971); see also Turner Broadcasting System, Inc. v. F.C.C.,
512 U.S. 622, 667 (1994) (“[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.” (citing Century Communications Corp. v. F.C.C., 835 F.2d 292, 304 (CADC 1987)).
178 Id.
The “reasonable inferences from substantial evidence” standard is not sufficiently 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 from substantial evidence” and require that the social science evidence be weighed under a clear and convincing 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 to 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 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

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179 Not all courts were concerned about the sufficiency of the scientific evidence. See Video Software Dealers Assoc. v. Maleng, 325 F.Supp.2d 1180, 1190 (acknowledging that the court can not give an advisory opinion, then, Judge Lasnik gave 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 Calvert, _supra_ note 22.

180 Legislators might look to the factors articulated in Daubert, 505 U.S. at 594.
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.

V. 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, reminiscent of the comic books debate 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.

Next term, the Supreme Court will consider the most recent legal challenge to violent video game restrictions in Schwarzenegger v. Entertainment Merchants Assoc. 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.

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181 Ashcroft, 535 U.S. at 573.
182 Kendrick, 244 F.3d at 577.
If the Court’s most recent First Amendment cases on animal cruelty videos and corporate campaign expenditures are a bellwether of the Schwarzenegger ruling, violent video games (and other depictions of violence) will receive the imprimatur of the Supreme Court as protected expression. As in U.S. 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.\(^{183}\)

After reviewing the social science research which has served as the basis for legislative findings to support violent video game restrictions, this paper 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 paper posits that the standard to apply for deference to legislative findings in First Amendment cases should be very high and clearly articulated.

The debate on 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

\(^{183}\) The Court invalidated the animal cruelty statute at in U.S. v. Stevens because the statute was substantially overbroad, failing the narrow tailoring required under strict scrutiny. 130 S.Ct. 1577.
Amendment protections demand that the line between fantasy and real life remains 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).