SUPREME COURT OF THE UNITED STATES

No. 08-1448

EDMUND G. BROWN, JR., GOVERNOR OF CALIFORNIA, ET AL., PETITIONERS v. ENTERTAINMENT MERCHANTS ASSOCIATION ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE NINTH CIRCUIT

[June 27, 2011]

JUSTICE BREYER, dissenting.

California imposes a civil fine of up to \$1,000 upon any person who distributes a violent video game in California without labeling it "18," or who sells or rents a labeled violent video game to a person under the age of 18. Representatives of the video game and software industries, claiming that the statute violates the First Amendment on its face, seek an injunction against its enforcement. Applying traditional First Amendment analysis, I would uphold the statute as constitutional on its face and would consequently reject the industries' facial challenge.

I A

California's statute defines a violent video game as: A game in which a player "kill[s], maim[s], dismember[s], or sexually assault[s] an image of a human being," and

"[a] reasonable person, considering the game as a whole, would find [the game] appeals to a deviant or morbid interest of minors,"

and

"[the game] is patently offensive to prevailing standards in the community as to what is suitable for minors,"

and

"the game, as a whole, ... lack[s] serious literary, artistic, political, or scientific value for minors." Cal. Civ. Code Ann. §1746(d)(1) (West 2009).

The statute in effect forbids the sale of such a game to minors unless they are accompanied by a parent; it requires the makers of the game to affix a label identifying it as a game suitable only for those aged 18 and over; it exempts retailers from liability unless such a label is properly affixed to the game; and it imposes a civil fine of up to \$1,000 upon a violator. See §§1746.1–1746.3.

В

A facial challenge to this statute based on the First Amendment can succeed only if "a substantial number of its applications are unconstitutional, judged in relation to the statute's plainly legitimate sweep." United States v. Stevens, 559 U.S. __, __ (2010) (slip op., at 10) (internal quotation marks omitted). Moreover, it is more difficult to mount a facial First Amendment attack on a statute that seeks to regulate activity that involves action as well as speech. See Broadrick v. Oklahoma, 413 U.S. 601, 614-615 (1973). Hence, I shall focus here upon an area within which I believe the State can legitimately apply its statute, namely sales to minors under the age of 17 (the age cutoff used by the industry's own ratings system), of highly realistic violent video games, which a reasonable game maker would know meet the Act's criteria. That area lies at the heart of the statute. I shall assume that the number of instances in which the State will enforce the statute within that area is comparatively large, and that the number outside that area (for example, sales to 17-year-olds) is comparatively small. And the activity the statute regulates combines speech with action (a virtual form of target practice).

Breyer, J., dissenting

C

In determining whether the statute is unconstitutional, I would apply both this Court's "vagueness" precedents and a strict form of First Amendment scrutiny. In doing so, the special First Amendment category I find relevant is not (as the Court claims) the category of "depictions of violence," ante, at 8, but rather the category of "protection" of children." This Court has held that the "power of the state to control the conduct of children reaches beyond the scope of its authority over adults." Prince v. Massachusetts, 321 U.S. 158, 170 (1944). And the "'regulatio[n] of communication addressed to [children] need not conform to the requirements of the [F]irst [A]mendment in the same way as those applicable to adults." Ginsberg v. New York, 390 U.S. 629, 638, n. 6 (1968) (quoting Emerson, Toward a General Theory of the First Amendment, 72 Yale L. J. 877, 939 (1963)).

The majority's claim that the California statute, if upheld, would create a "new categor[y] of unprotected speech," ante, at 3, 6, is overstated. No one here argues that depictions of violence, even extreme violence, automatically fall outside the First Amendment's protective scope as, for example, do obscenity and depictions of child pornography. We properly speak of categories of expression that lack protection when, like "child pornography," the category is broad, when it applies automatically, and when the State can prohibit everyone, including adults, from obtaining access to the material within it. where, as here, careful analysis must precede a narrower judicial conclusion (say, denying protection to a shout of "fire" in a crowded theater, or to an effort to teach a terrorist group how to peacefully petition the United Nations), we do not normally describe the result as creating a "new category of unprotected speech." See Schenck v. United States, 249 U.S. 47, 52 (1919); Holder v. Humanitarian Law Project, 561 U. S. __ (2010).

Thus, in *Stevens*, after rejecting the claim that *all* depictions of animal cruelty (a category) fall outside the First Amendment's protective scope, we went on to decide whether the particular statute at issue violates the First Amendment under traditional standards; and we held that, because the statute was overly broad, it was invalid. Similarly, here the issue is whether, applying traditional First Amendment standards, this statute does, or does not, pass muster.

П

In my view, California's statute provides "fair notice of what is prohibited," and consequently it is not impermissibly vague. *United States* v. *Williams*, 553 U. S. 285, 304 (2008). *Ginsberg* explains why that is so. The Court there considered a New York law that forbade the sale to minors of a

"picture, photograph, drawing, sculpture, motion picture film, or similar visual representation or image of a person or portion of the human body which depicts nudity . . . ,"

that

"predominately appeals to the prurient, shameful or morbid interest of minors,"

and

"is patently offensive to prevailing standards in the adult community as a whole with respect to what is suitable material for minors,"

and

"is utterly without redeeming social importance for minors." 390 U.S., at 646-647.

This Court upheld the New York statute in *Ginsberg* (which is sometimes unfortunately confused with a very

different, earlier case, *Ginzburg* v. *United States*, 383 U. S. 463 (1966)). The five-Justice majority, in an opinion written by Justice Brennan, wrote that the statute was sufficiently clear. 390 U. S., at 643–645. No Member of the Court voiced any vagueness objection. See *id.*, at 648–650 (Stewart, J., concurring in result); *id.*, at 650–671 (Douglas, J., joined by Black, J., dissenting); *id.*, at 671–675 (Fortas, J., dissenting).

Comparing the language of California's statute (set forth supra, at 1-2) with the language of New York's statute (set forth immediately above), it is difficult to find any vagueness-related difference. Why are the words "kill," "maim," and "dismember" any more difficult to understand than the word "nudity?" JUSTICE ALITO objects that these words do "not perform the narrowing function" that this Court has required in adult obscenity cases, where statutes can only cover "hard core" depictions. Ante, at 6 (opinion concurring in judgment). But the relevant comparison is not to adult obscenity cases but to Ginsberg, which dealt with "nudity," a category no more "narrow" than killing and maiming. And in any event, narrowness and vagueness do not necessarily have anything to do with one another. All that is required for vagueness purposes is that the terms "kill," "maim," and "dismember" give fair notice as to what they cover, which they do.

The remainder of California's definition copies, almost word for word, the language this Court used in *Miller* v. *California*, 413 U. S. 15 (1973), in permitting a *total ban* on material that satisfied its definition (one enforced with *criminal* penalties). The California law's reliance on "community standards" adheres to *Miller*, and in *Fort Wayne Books, Inc.* v. *Indiana*, 489 U. S. 46, 57–58 (1989), this Court specifically upheld the use of *Miller*'s language against charges of vagueness. California only departed from the *Miller* formulation in two significant respects: It

substituted the word "deviant" for the words "prurient" and "shameful," and it three times added the words "for minors." The word "deviant" differs from "prurient" and "shameful," but it would seem no less suited to defining and narrowing the reach of the statute. And the addition of "for minors" to a version of the *Miller* standard was approved in *Ginsberg*, 390 U. S., at 643, even though the New York law "dr[ew] no distinction between young children and adolescents who are nearing the age of majority," *ante*, at 8 (opinion of ALITO, J.).

Both the *Miller* standard and the law upheld in *Gins*berg lack perfect clarity. But that fact reflects the difficulty of the Court's long search for words capable of protecting expression without depriving the State of a legitimate constitutional power to regulate. As is well known, at one point Justice Stewart thought he could do no better in defining obscenity than, "I know it when I see it." Jacobellis v. Ohio, 378 U.S. 184, 197 (1964) (concurring opinion). And Justice Douglas dissented from *Miller*'s standard, which he thought was still too vague. 413 U.S., at 39-40. Ultimately, however, this Court accepted the "community standards" tests used in *Miller* and *Ginsberg*. They reflect the fact that sometimes, even when a precise standard proves elusive, it is easy enough to identify instances that fall within a legitimate regulation. And they seek to draw a line, which, while favoring free expression, will nonetheless permit a legislature to find the words necessary to accomplish a legitimate constitutional objective. Cf. Williams, supra, at 304 (the Constitution does not always require "'perfect clarity and precise guidance," even when "expressive activity" is involved).

What, then, is the difference between *Ginsberg* and *Miller* on the one hand and the California law on the other? It will often be easy to pick out cases at which California's statute directly aims, involving, say, a character who shoots out a police officer's knee, douses him with

gasoline, lights him on fire, urinates on his burning body, and finally kills him with a gunshot to the head. (Footage of one such game sequence has been submitted in the record.) See also ante, at 14-15 (ALITO, J., concurring in judgment). As in *Miller* and *Ginsberg*, the California law clearly protects even the most violent games that possess serious literary, artistic, political, or scientific value. §1746(d)(1)(A)(iii). And it is easier here than in *Miller* or Ginsberg to separate the sheep from the goats at the statute's border. That is because here the industry itself has promulgated standards and created a review process, in which adults who "typically have experience with children" assess what games are inappropriate for minors. See Entertainment Software Rating Board, Rating Process, online at http://www.esrb.org/ratings/&ratings process.jsp (all Internet materials as visited June 24, 2011, and available in Clerk of Court's case file).

There is, of course, one obvious difference: The *Ginsberg* statute concerned depictions of "nudity," while California's statute concerns extremely violent video games. But for purposes of vagueness, why should that matter? JUSTICE ALITO argues that the *Miller* standard sufficed because there are "certain generally accepted norms concerning expression related to sex," whereas there are no similarly "accepted standards regarding the suitability of violent entertainment." Ante, at 7–8. But there is no evidence that is so. The Court relied on "community standards" in Miller precisely because of the difficulty of articulating "accepted norms" about depictions of sex. I can find no difference—historical or otherwise—that is relevant to the vagueness question. Indeed, the majority's examples of literary descriptions of violence, on which JUSTICE ALITO relies, do not show anything relevant at all.

After all, one can find in literature as many (if not more) descriptions of physical love as descriptions of violence. Indeed, sex "has been a theme in art and literature

throughout the ages." *Ashcroft* v. *Free Speech Coalition*, 535 U. S. 234, 246 (2002). For every Homer, there is a Titian. For every Dante, there is an Ovid. And for all the teenagers who have read the original versions of Grimm's Fairy Tales, I suspect there are those who know the story of Lady Godiva.

Thus, I can find no meaningful vagueness-related differences between California's law and the New York law upheld in *Ginsberg*. And if there remain any vagueness problems, the state courts can cure them through interpretation. See *Erznoznik* v. *Jacksonville*, 422 U. S. 205, 216 (1975) ("[S]tate statute should not be deemed facially invalid unless it is not readily subject to a narrowing construction by the state courts"). Cf. *Ginsberg*, *supra*, at 644 (relying on the fact that New York Court of Appeals would read a knowledge requirement into the statute); *Berry* v. *Santa Barbara*, 40 Cal. App. 4th 1075, 1088–1089, 47 Cal. Rptr. 2d 661, 669 (1995) (reading a knowledge requirement into a statute). Consequently, for purposes of this facial challenge, I would not find the statute unconstitutionally vague.

Ш

Video games combine physical action with expression. Were physical activity to predominate in a game, government could appropriately intervene, say by requiring parents to accompany children when playing a game involving actual target practice, or restricting the sale of toys presenting physical dangers to children. See generally Consumer Product Safety Improvement Act of 2008, 122 Stat. 3016 ("Title I—Children's Product Safety"). But because video games also embody important expressive and artistic elements, I agree with the Court that the First Amendment significantly limits the State's power to regulate. And I would determine whether the State has exceeded those limits by applying a strict standard of review.

Like the majority, I believe that the California law must be "narrowly tailored" to further a "compelling interest," without there being a "less restrictive" alternative that would be "at least as effective." Reno v. American Civil Liberties Union, 521 U.S. 844, 874, 875, 879 (1997). I would not apply this strict standard "mechanically." United States v. Playboy Entertainment Group, Inc., 529 U. S. 803, 841 (2000) (BREYER, J., joined by Rehnquist, C. J., and O'Connor and SCALIA, JJ., dissenting). Rather, in applying it, I would evaluate the degree to which the statute injures speech-related interests, the nature of the potentially-justifying "compelling interests," the degree to which the statute furthers that interest, the nature and effectiveness of possible alternatives, and, in light of this evaluation, whether, overall, "the statute works speechrelated harm . . . out of proportion to the benefits that the statute seeks to provide." Ibid. See also Burson v. Freeman, 504 U.S. 191, 210 (1992) (plurality opinion) (applying strict scrutiny and finding relevant the lack of a "significant impingement" on speech).

First Amendment standards applied in this way are difficult but not impossible to satisfy. Applying "strict scrutiny" the Court has upheld restrictions on speech that, for example, ban the teaching of peaceful dispute resolution to a group on the State Department's list of terrorist organizations, *Holder*, 561 U. S., at ___ (slip op., at 22–34); but cf. *id.*, at ___ (slip op., at 1) (BREYER, J., dissenting), and limit speech near polling places, *Burson*, *supra*, at 210–211 (plurality opinion). And applying less clearly defined but still rigorous standards, the Court has allowed States to require disclosure of petition signers, *Doe* v. *Reed*, 561 U. S. ___ (2010), and to impose campaign contribution limits that were "closely drawn' to match a 'sufficiently important interest,'" *Nixon* v. *Shrink Missouri Government PAC*, 528 U. S. 377, 387–388 (2000).

Moreover, although the Court did not specify the "level

of scrutiny" it applied in *Ginsberg*, we have subsequently described that case as finding a "compelling interest" in protecting children from harm sufficient to justify limitations on speech. See *Sable Communications of Cal., Inc.* v. *FCC*, 492 U. S. 115, 126 (1989). Since the Court in *Ginsberg* specified that the statute's prohibition applied to material that was *not* obscene, 390 U. S., at 634, I cannot dismiss *Ginsberg* on the ground that it concerned obscenity. But cf. *ante*, at 6 (majority opinion). Nor need I depend upon the fact that the Court in *Ginsberg* insisted only that the legislature have a "rational" basis for finding the depictions there at issue harmful to children. 390 U. S., at 639. For in this case, California has substantiated its claim of harm with considerably stronger evidence.

Α

California's law imposes no more than a modest restriction on expression. The statute prevents no one from playing a video game, it prevents no adult from buying a video game, and it prevents no child or adolescent from obtaining a game provided a parent is willing to help. §1746.1(c). All it prevents is a child or adolescent from buying, without a parent's assistance, a gruesomely violent video game of a kind that the industry *itself* tells us it wants to keep out of the hands of those under the age of 17. See Brief for Respondents 8.

Nor is the statute, if upheld, likely to create a precedent that would adversely affect other media, say films, or videos, or books. A typical video game involves a significant amount of physical activity. See *ante*, at 13–14 (ALITO, J., concurring in judgment) (citing examples of the increasing interactivity of video game controllers). And pushing buttons that achieve an interactive, virtual form of target practice (using images of human beings as targets), while containing an expressive component, is not

just like watching a typical movie. See *infra*, at 14.

B

The interest that California advances in support of the statute is compelling. As this Court has previously described that interest, it consists of both (1) the "basic" parental claim "to authority in their own household to direct the rearing of their children," which makes it proper to enact "laws designed to aid discharge of [parental] responsibility," and (2) the State's "independent interest in the well-being of its youth." Ginsberg, 390 U.S., at 639-640. Cf. id., at 639, n. 7 ("'[O]ne can well distinguish laws which do not impose a morality on children, but which support the right of parents to deal with the morals of their children as they see fit" (quoting Henkin, Morals and the Constitution: The Sin of Obscenity, 63 Colum. L. Rev. 391, 413, n. 68 (1963))). And where these interests work in tandem, it is not fatally "underinclusive" for a State to advance its interests in protecting children against the special harms present in an interactive video game medium through a default rule that still allows parents to provide their children with what their parents wish.

Both interests are present here. As to the need to help parents guide their children, the Court noted in 1968 that "'parental control or guidance cannot always be provided." 390 U.S., at 640. Today, 5.3 million grade-school-age children of working parents are routinely home alone. See Dept. of Commerce, Census Bureau, Who's Minding the Kids? Child Care Arrangements: Spring 2005/Summer 2006, p. 12 (2010), online at http://www.census.gov/prod/2010pubs/p70-121.pdf. Thus, it has, if anything, become more important to supplement parents' authority to guide their children's development.

As to the State's independent interest, we have pointed out that juveniles are more likely to show a "lack of ma-

turity" and are "more vulnerable or susceptible to negative influences and outside pressures," and that their "character . . . is not as well formed as that of an adult." *Roper* v. *Simmons*, 543 U. S. 551, 569–570 (2005). And we have therefore recognized "a compelling interest in protecting the physical and psychological well-being of minors." *Sable Communications*, *supra*, at 126.

At the same time, there is considerable evidence that California's statute significantly furthers this compelling interest. That is, in part, because video games are excellent teaching tools. Learning a practical task often means developing habits, becoming accustomed to performing the task, and receiving positive reinforcement when performing that task well. Video games can help develop habits, accustom the player to performance of the task, and reward the player for performing that task well. Why else would the Armed Forces incorporate video games into its training? See CNN, War Games: Military Train-Goes High-Tech (Nov. 22,2001), online http://articles.cnn.com/2001-11-2/tech/war.games_1_ictbill-swartout-real-world-training?_s=PM:TECH.

When the military uses video games to help soldiers train for missions, it is using this medium for a beneficial purpose. But California argues that when the teaching features of video games are put to less desirable ends, harm can ensue. In particular, extremely violent games can harm children by rewarding them for being violently aggressive in play, and thereby often teaching them to be violently aggressive in life. And video games can cause more harm in this respect than can typically passive media, such as books or films or television programs.

There are many scientific studies that support California's views. Social scientists, for example, have found *causal* evidence that playing these games results in harm. Longitudinal studies, which measure changes over time, have found that increased exposure to violent video games

causes an increase in aggression over the same period. See Möller & Krahé, Exposure to Violent Video Games and Aggression in German Adolescents: A Longitudinal Analysis, 35 Aggressive Behavior 75 (2009); Gentile & Gentile, Violent Video Games as Exemplary Teachers: A Conceptual Analysis, 37 J. Youth & Adolescence 127 (2008); Anderson et al., Longitudinal Effects of Violent Video Games on Aggression in Japan and the United States, 122 Pediatrics e1067 (2008); Wallenius & Punamäki, Digital Game Violence and Direct Aggression in Adolescence: A Longitudinal Study of the Roles of Sex, Age, and Parent-Child Communication, 29 J. Applied Developmental Psychology 286 (2008).

Experimental studies in laboratories have found that subjects randomly assigned to play a violent video game subsequently displayed more characteristics of aggression than those who played nonviolent games. See, *e.g.*, Anderson et al., Violent Video Games: Specific Effects of Violent Content on Aggressive Thoughts and Behavior, 36 Advances in Experimental Soc. Psychology 199 (2004).

Surveys of 8th and 9th grade students have found a correlation between playing violent video games and aggression. See, *e.g.*, Gentile, Lynch, Linder, & Walsh, The Effects of Violent Video Game Habits On Adolescent Hostility, Aggressive Behaviors, and School Performance, 27 J. Adolescence 5 (2004).

Cutting-edge neuroscience has shown that "virtual violence in video game playing results in those neural patterns that are considered characteristic for aggressive cognition and behavior." Weber, Ritterfeld, & Mathiak, Does Playing Violent Video Games Induce Aggression? Empirical Evidence of a Functional Magnetic Resonance Imaging Study, 8 Media Psychology 39, 51 (2006).

And "meta-analyses," *i.e.*, studies of all the studies, have concluded that exposure to violent video games "was positively associated with aggressive behavior, aggressive

cognition, and aggressive affect," and that "playing violent video games is a *causal* risk factor for long-term harmful outcomes." Anderson et al., Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review, 136 Psychological Bulletin 151, 167, 169 (2010) (emphasis added).

Some of these studies take care to explain in a commonsense way why video games are potentially more harmful than, say, films or books or television. In essence, they say that the closer a child's behavior comes, not to watching, but to acting out horrific violence, the greater the potential psychological harm. See Bushman & Huesmann, Aggression, in 2 Handbook of Social Pscyhology 833, 851 (S. Fiske, D. Gilbert, & G. Lindzev eds., 5th ed. 2010) (video games stimulate more aggression because "[p]eople learn better when they are actively involved," players are "more likely to identify with violent characters," and "violent games directly reward violent behavior"); Polman, de Castro, & van Aken, Experimental Study of the Differential Effects of Playing Versus Watching Violent Video Games on Children's Aggressive Behavior, 34 Aggressive Behavior 256 (2008) (finding greater aggression resulting from playing, as opposed to watching, a violent game); C. Anderson, D. Gentile, & K. Buckley, Violent Video Game Effects on Children and Adolescents 136–137 (2007) (three studies finding greater effects from games as opposed to television). See also infra, at 15–16 (statements of expert public health associations agreeing that interactive games can be more harmful than "passive" media like television); ante, at 12-17 (ALITO, J., concurring in judgment).

Experts debate the conclusions of all these studies. Like many, perhaps most, studies of human behavior, each study has its critics, and some of those critics have produced studies of their own in which they reach different

conclusions. (I list both sets of research in the appendixes.) I, like most judges, lack the social science expertise to say definitively who is right. But associations of public health professionals who do possess that expertise have reviewed many of these studies and found a significant risk that violent video games, when compared with more passive media, are particularly likely to cause children harm.

Eleven years ago, for example, the American Academy of Pediatrics, the American Academy of Child & Adolescent Psychiatry, the American Psychological Association, the American Medical Association, the American Academy of Family Physicians, and the American Psychiatric Association released a joint statement, which said:

"[O]ver 1000 studies . . . point overwhelmingly to a causal connection between media violence and aggressive behavior in some children . . . [and, though less research had been done at that time, preliminary studies indicated that] the impact of violent interactive entertainment (video games and other interactive media) on young people . . . may be *significantly more severe* than that wrought by television, movies, or music." Joint Statement on the Impact of Entertainment Violence on Children (2000) (emphasis added), online at http://www.aap.org/advocacy/releases/jstmtevc.htm.

Five years later, after more research had been done, the American Psychological Association adopted a resolution that said:

"[C]omprehensive analysis of violent interactive video game research suggests such exposure . . . increases aggressive behavior, . . . increases aggressive thoughts, . . . increases angry feelings, . . . decreases helpful behavior, and . . . increases physiological arousal." Resolution on Violence in Video Games and Interactive Media (2005), online at

http://www.apa.org/about/governance/council/policy/interactive-media.pdf.

The Association added:

"[T]he practice, repetition, and rewards for acts of violence may be *more conducive* to increasing aggressive behavior among children and youth than passively watching violence on TV and in films." *Ibid.* (emphasis added).

Four years after that, in 2009, the American Academy of Pediatrics issued a statement in significant part about interactive media. It said:

"Studies of these rapidly growing and ever-more-sophisticated types of media have indicated that the effects of child-initiated virtual violence may be even more profound than those of passive media such as television. In many games the child or teenager is 'embedded' in the game and uses a 'joystick' (handheld controller) that enhances both the experience and the aggressive feelings." Policy Statement—Media Violence, 124 Pediatrics 1495, 1498 (2009) (emphasis added).

It added:

"Correlational and experimental studies have revealed that violent video games lead to increases in aggressive behavior and aggressive thinking and decreases in prosocial behavior. Recent longitudinal studies . . . have revealed that in as little as 3 months, high exposure to violent video games increased physical aggression. Other recent longitudinal studies . . . have revealed similar effects across 2 years." *Ibid*. (footnotes omitted).

Unlike the majority, I would find sufficient grounds in these studies and expert opinions for this Court to defer to

an elected legislature's conclusion that the video games in question are particularly likely to harm children. Court has always thought it owed an elected legislature some degree of deference in respect to legislative facts of this kind, particularly when they involve technical matters that are beyond our competence, and even in First Amendment cases. See *Holder*, 561 U.S., at ___ (slip op., at 28–29) (deferring, while applying strict scrutiny, to the Government's national security judgments); Turner Broadcasting System, Inc. v. FCC, 520 U.S. 180, 195–196 (1997) (deferring, while applying intermediate scrutiny, to the Government's technological judgments). The majority, in reaching its own, opposite conclusion about the validity of the relevant studies, grants the legislature no deference at all. Compare ante, at 12–13 (stating that the studies do not provide evidence that violent video games "cause" harm (emphasis deleted)), with supra, at 12–13 (citing longitudinal studies finding causation).

(

I can find no "less restrictive" alternative to California's law that would be "at least as effective." See Reno, 521 U. S., at 874. The majority points to a voluntary alternative: The industry tries to prevent those under 17 from buying extremely violent games by labeling those games with an "M" (Mature) and encouraging retailers to restrict their sales to those 17 and older. See ante, at 15–16. But this voluntary system has serious enforcement gaps. When California enacted its law, a Federal Trade Commission (FTC) study had found that nearly 70% of unaccompanied 13- to 16-year-olds were able to buy M-rated video games. FTC, Marketing Violent Entertainment to Children 27 (2004), online at http://www.ftc.gov/os/2004/ 07/040708kidsviolencerpt.pdf. Subsequently the voluntary program has become more effective. But as of the FTC's most recent update to Congress, 20% of those

under 17 are still able to buy M-rated video games, and, breaking down sales by store, one finds that this number rises to nearly 50% in the case of one large national chain. FTC, Marketing Violent Entertainment to Children 28 (2009), online at http://www.ftc.gov/os/2009/12/P994511violententertainment.pdf. And the industry could easily revert back to the substantial noncompliance that existed in 2004, particularly after today's broad ruling reduces the industry's incentive to police itself.

The industry also argues for an alternative technological solution, namely "filtering at the console level." Brief for Respondents 53. But it takes only a quick search of the Internet to find guides explaining how to circumvent any such technological controls. YouTube viewers, for example, have watched one of those guides (called "How to bypass parental controls on the Xbox 360") more than 47,000 times. See http://www.youtube.com/watch?v=CFIVfVmvN6k.

IV

The upshot is that California's statute, as applied to its heartland of applications (*i.e.*, buyers under 17; extremely violent, realistic video games), imposes a restriction on speech that is modest at most. That restriction is justified by a compelling interest (supplementing parents' efforts to prevent their children from purchasing potentially harmful violent, interactive material). And there is no equally effective, less restrictive alternative. California's statute is consequently constitutional on its face—though litigants remain free to challenge the statute as applied in particular instances, including any effort by the State to apply it to minors aged 17.

I add that the majority's different conclusion creates a serious anomaly in First Amendment law. *Ginsberg* makes clear that a State can prohibit the sale to minors of depictions of nudity; today the Court makes clear that a

State cannot prohibit the sale to minors of the most violent interactive video games. But what sense does it make to forbid selling to a 13-year-old boy a magazine with an image of a nude woman, while protecting a sale to that 13-year-old of an interactive video game in which he actively, but virtually, binds and gags the woman, then tortures and kills her? What kind of First Amendment would permit the government to protect children by restricting sales of that extremely violent video game *only* when the woman—bound, gagged, tortured, and killed—is also topless?

This anomaly is not compelled by the First Amendment. It disappears once one recognizes that extreme violence, where interactive, and without literary, artistic, or similar justification, can prove at least as, if not more, harmful to children as photographs of nudity. And the record here is more than adequate to support such a view. That is why I believe that *Ginsberg* controls the outcome here a fortiori. And it is why I believe California's law is constitutional on its face.

This case is ultimately less about censorship than it is about education. Our Constitution cannot succeed in securing the liberties it seeks to protect unless we can raise future generations committed cooperatively to making our system of government work. Education, however, is about choices. Sometimes, children need to learn by making choices for themselves. Other times, choices are made for children—by their parents, by their teachers, and by the people acting democratically through their governments. In my view, the First Amendment does not disable government from helping parents make such a choice here—a choice not to have their children buy extremely violent, interactive video games, which they more than reasonably fear pose only the risk of harm to those children.

For these reasons, I respectfully dissent.

Appendix A to the opinion of Breyer, J.

APPENDIXES

With the assistance of the Supreme Court Library, I have compiled these two appendixes listing peer-reviewed academic journal articles on the topic of psychological harm resulting from playing violent video games. The library conducted a search for relevant articles on the following databases: PsycINFO, PubMed, Academic Search Premier, ArticleFirst (OCLC), and Dialog (files 1, 7, 34, 98, 121, 142, 144, 149). The following search terms were used: "(video* or computer or arcade or online) and (game*) and (attack* or fight* or aggress* or violen* or hostil* or ang* or arous* or prosocial or help* or desens* or empathy)." After eliminating irrelevant matches based on title or abstract, I categorized these articles as either supporting the hypothesis that violent video games are harmful (listed in Appendix A), or not supporting/rejecting the hypothesis that violent video games are harmful (listed in Appendix B).

Many, but not all, of these articles were available to the California Legislature or the parties in briefing this case. I list them because they suggest that there is substantial (though controverted) evidence supporting the expert associations of public health professionals that have concluded that violent video games can *cause* children psychological harm. See *supra*, at 15–16. And consequently, these studies help to substantiate the validity of the original judgment of the California Legislature, as well as that judgment's continuing validity.

Α

Anderson & Bushman, Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature, 12 Psychological Science: J. Am. Psychological Society 353

(2001).

- Anderson & Dill, Video Games and Aggressive Thoughts, Feelings, & Behavior in the Laboratory and in Life, 78 J. Personality & Soc. Psychology 772 (2000).
- Anderson et al., Violent Video Games: Specific Effects of Violent Content on Aggressive Thoughts and Behavior, 36 Advances in Experimental Soc. Psychology 199 (2004).
- Anderson & Ford, Affect of the Game Player: Short-Term Effects of Highly and Mildly Aggressive Video Games, 12 Personality & Soc. Psychology Bull. 390 (1986).
- Anderson & Morrow, Competitive Aggression Without Interaction: Effects of Competitive Versus Cooperative Instructions on Aggressive Behavior in Video Games, 21 Personality & Soc. Psychology Bull. 1020 (1995).
- Anderson et al., Longitudinal Effects of Violent Video Games on Aggression in Japan and the United States, 122 Pediatrics e1067 (2008).
- Anderson et al., Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review, 136 Psychological Bull. 151 (2010).
- Anderson, An Update on the Effects of Playing Violent Video Games, 27 J. Adolescence 113 (2004).
- Anderson et al., The Influence of Media Violence on Youth, 4 Psychological Science in the Public Interest 81 (2003).
- Anderson & Carnagey, Causal Effects of Violent Sports Video Games on Aggression: Is it Competitiveness or Violent Content? 45 J. Experimental Soc. Psychology 731 (2009).
- Anderson & Murphy, Violent Video Games and Aggressive Behavior in Young Women, 29 Aggressive Behavior 423 (2003).
- Arriaga, Esteves, Carneiro, & Monteiro, Violent Computer Games and Their Effects on State Hostility and Physiological Arousal, 32 Aggressive Behavior 358 (2006).

- Arriaga, Esteves, Carneiro, & Monteiro, Are the Effects of Unreal Violent Video Games Pronounced When Playing With a Virtual Reality System? 34 Aggressive Behavior 521 (2008).
- Baldaro et al., Aggressive and Non-Violent Videogames: Short-Term Psychological and Cardiovascular Effects on Habitual Players, 20 Stress & Health: J. Int'l Society for Investigation of Stress 203 (2004).
- Ballard, Hamby, Panee, & Nivens, Repeated Exposure to Video Game Play Results in Decreased Blood Pressure Responding, 8 Media Psychology 323 (2006).
- Ballard & Lineberger, Video Game Violence and Confederate Gender: Effects on Reward and Punishment Given by College Males, 41 Sex Roles 541 (1999).
- Ballard & Wiest, Mortal Kombat (tm): The Effects of Violent Videogame Play on Males' Hostility and Cardiovascular Responding, 26 J. Applied Soc. Psychology 717 (1996).
- Barlett, Branch, Rodeheffer, & Harris, How Long do the Short-Term Violent Video Game Effects Last? 35 Aggressive Behavior 225 (2009).
- Barlett, Rodeheffer, Baldassaro, Hinkin, & Harris, The Effect of Advances in Video Game Technology and Content on Aggressive Cognitions, Hostility, and Heart Rate, 11 Media Psychology 540 (2008).
- Barlett, Harris, & Baldassaro, Longer You Play, the More Hostile You Feel: Examination of First Person Shooter Video Games and Aggression During Video Game Play, 33 Aggressive Behavior 486 (2007).
- Barlett, Harris, & Bruey, The Effect of the Amount of Blood in a Violent Video Game on Aggression, Hostility, and Arousal, 44 J. Experimental Soc. Psychology 539 (2008).
- Barlett & Rodeheffer, Effects of Realism on Extended Violent and Nonviolent Video Game Play on Aggressive Thoughts, Feelings, and Physiological Arousal, 35 Ag-

- gressive Behavior 213 (2009).
- Barlett, Anderson, & Swing, Video Game Effects—Confirmed, Suspected, and Speculative: A Review of the Evidence, 40 Simulation & Gaming 377 (2009).
- Bartholow, Sestir, & Davis, Correlates and Consequences of Exposure to Video Game Violence: Hostile Personality, Empathy, and Aggressive Behavior, 31 Personality & Soc. Psychology Bull. 1573 (2005).
- Bartholow & Anderson, Effects of Violent Video Games on Aggressive Behavior: Potential Sex Differences, 38 J. Experimental Soc. Psychology 283 (2002).
- Bartholow, Bushman, & Sestir, Chronic Violent Video Game Exposure and Desensitization to Violence: Behavioral and Event-Related Brain Potential Data, 42 J. Experimental Soc. Psychology 532 (2006).
- Bluemke, Friedrich, & Zumbach, The Influence of Violent and Nonviolent Computer Games on Implicit Measures of Aggressiveness, 36 Aggressive Behavior 1 (2010).
- Brady & Matthews, Effects of Media Violence on Health-Related Outcomes Among Young Men, 160 Archives of Pediatrics & Adolescent Med. 341 (2006).
- Browne & Hamilton-Giachritsis, The Influence of Violent Media on Children and Adolescents: A Public-Health Approach, 365 Lancet 702 (2005).
- Bushman & Anderson, Violent Video Games and Hostile Expectations: A Test of the General Aggression Model, 28 Personality & Soc. Psychology Bull. 1679 (2002).
- Bushman & Anderson, Comfortably Numb: Desensitizing Effects of Violent Media on Helping Others, 20 Psychological Science: J. Am. Psychological Society 273 (2009).
- Bushman, Rothstein, & Anderson, Much Ado About Something: Violent Video Game Effects and a School of Red Herring: Reply to Ferguson and Kilburn, 136 Psychological Bull. 182 (2010).
- Calvert & Tan, Impact of Virtual Reality on Young Adults' Physiological Arousal and Aggressive Thoughts: Interac-

- tion Versus Observation, 15 J. Applied Developmental Psychology 125 (1994).
- Carnagey, Anderson, & Bartholow, Media Violence and Social Neuroscience: New Questions and New Opportunities, 16 Current Directions in Psychological Science 178 (2007).
- Carnagey & Anderson, Violent Video Game Exposure and Aggression: A Literature Review, 45 Minerva Psichiatrica 1 (2004).
- Carnagey & Anderson, The Effects of Reward and Punishment in Violent Video Games on Aggressive Affect, Cognition, and Behavior, 16 Psychological Science: J. Am. Psychological Society 882 (2005).
- Carnagey, Anderson, & Bushman, The Effect of Video Game Violence on Physiological Desensitization to Reallife Violence, 43 J. Experimental Soc. Psychology 489 (2007).
- Chambers & Ascione, The Effects of Prosocial and Aggressive Videogames on Children's Donating and Helping, 148 J. Genetic Psychology: Research and Theory on Human Development 499 (1987).
- Chory & Cicchirillo, The Relationship Between Video Game Play and Trait Verbal Aggressiveness: An Application of the General Aggression Model, 24 Communications Research Reports 113 (2007).
- Cicchirillo & Chory-Assad, Effects of Affective Orientation and Video Game Play on Aggressive Thoughts and Behaviors, 49 J. Broadcasting & Electronic Media 435 (2005).
- Colwell & Payne, Negative Correlates of Computer Game Play in Adolescents, 91 British J. Psychology 295 (2000).
- Cooper & Mackie, Video Games and Aggression in Children, 16 J. Applied Soc. Psychology 726 (1986).
- Deselms & Altman, Immediate and Prolonged Effects of Videogame Violence, 33 J. Applied Soc. Psychology 1553 (2003).

- Dill & Dill, Video Game Violence: A Review of the Empirical Literature, 3 Aggression & Violent Behavior 407 (1998).
- Doğan, Video Games and Children: Violence in Video Games, 44 Yeni Symposium 161 (2006).
- Eastin, Video Game Violence and the Female Game Player: Self- and Opponent Gender Effects on Presence and Aggressive Thoughts, 32 Human Communication Research 351 (2006).
- Emes, Is Mr Pac Man Eating Our Children? A Review of the Effect of Video Games on Children, 42 Canadian J. Psychiatry 409 (1997).
- Farrar, Krcmar, & Nowak, Contextual Features of Violent Video Games, Mental Models, and Aggression, 56 J. Communication 387 (2006).
- Fischer, Kastenmüller, & Greitemeyer, Media Violence and the Self: The Impact of Personalized Gaming Characters in Aggressive Video Games on Aggressive Behavior, 46 J. Experimental Soc. Psychology 192 (2010).
- Funk, Children's Exposure to Violent Video Games and Desensitization to Violence, 14 Child & Adolescent Psychiatric Clinics North Am. 387 (2005).
- Funk, Video Games, 16 Adolescent Med. Clinics 395 (2005).
- Funk, Baldacci, Pasold, & Baumgardner, Violence Exposure in Real-Life, Video Games, Television, Movies, and the Internet: Is There Desensitization? 27 J. Adolescence 23 (2004).
- Funk, Buchman, Jenks, & Bechtoldt, Playing Violent Video Games, Desensitization, and Moral Evaluation in Children, 24 J. Applied Developmental Psychology 413 (2003).
- Funk et al., Aggression and Psychopathology in Adolescents with a Preference for Violent Electronic Games, 28 Aggressive Behavior 134 (2002).
- Funk, Buchman, Jenks, & Bechtoldt, An Evidence-Based

- Approach to Examining the Impact of Playing Violent Video and Computer Games, SIMILE: Studies in Media & Information Literacy Educ., vol. 2, no. 4, p. 1 (Nov. 2002).
- Gentile & Stone, Violent Video Game Effects on Children and Adolescents: A Review of the Literature, 57 Minerva Pediatrica 337 (2005).
- Gentile et al., The Effects of Prosocial Video Games on Prosocial Behaviors: International Evidence From Correlational, Longitudinal, and Experimental Studies, 35 Personality & Soc. Psychology Bull. 752 (2009).
- Gentile, Lynch, Linder, & Walsh, The Effects of Violent Video Game Habits on Adolescent Hostility, Aggressive Behaviors, and School Performance, 27 J. Adolescence 5 (2004).
- Gentile & Gentile, Violent Video Games as Exemplary Teachers: A Conceptual Analysis, 37 J. Youth & Adolescence 127 (2008).
- Giumetti & Markey, Violent Video Games and Anger as Predictors of Aggression, 41 J. Research in Personality 1234 (2007).
- Graybill, Kirsch, & Esselman, Effects of Playing Violent Versus Nonviolent Video Games on the Aggressive Ideation of Aggressive and Nonaggressive Children, 15 Child Study J. 199 (1985).
- Grigoryan, Stepanyan, Stepanyan, & Agababyan, Influence of Aggressive Computer Games on the Brain Cortex Activity Level in Adolescents, 33 Human Physiology 34 (2007).
- Hastings et al., Young Children's Video/Computer Game Use: Relations With School Performance and Behavior, 30 Issues in Mental Health Nursing 638 (2009).
- Huesmann, Nailing the Coffin Shut on Doubts That Violent Video Games Stimulate Aggression: Comment on Anderson et al., 136 Psychological Bull. 179 (2010).
- Huesmann, The Impact of Electronic Media Violence:

Appendix A to the opinion of Breyer, J.

- Scientific Theory and Research, 41 J. Adolescent Health S6 (2007).
- Huesmann & Taylor, The Role of Media Violence in Violent Behavior, 27 Annual Rev. Public Health 393 (2006).
- Hummer et al., Short-Term Violent Video Game Play by Adolescents Alters Prefrontal Activity During Cognitive Inhibition, 13 Media Psychology 136 (2010).
- Irwin & Gross, Cognitive Temp, Violent Video Games, and Aggressive Behavior in Young Boys, 10 J. Family Violence 337 (1995).
- Kirsh & Mounts, Violent Video Game Play impacts Facial Emotion Recognition, 33 Aggressive Behavior 353 (2007).
- Kirsh, Mounts, & Olczak, Violent Media Consumption and the Recognition of Dynamic Facial Expressions, 21 J. Interpersonal Violence 571 (2006).
- Kirsh, Olczak, & Mounts, Violent Video Games Induce an Affect Processing Bias, 7 Media Psychology 239 (2005).
- Kirsh, The Effects of Violent Video Games on Adolescents: The Overlooked Influence of Development, 8 Aggression & Violent Behavior 377 (2003).
- Kirsh, Seeing the World Through Mortal Kombat-Colored Glasses: Violent Video Games and the Development of a Short-term Hostile Attribution Bias, 5 Childhood 177 (1998).
- Konijn, Bijvank, & Bushman, I Wish I Were a Warrior: The Role of Wishful Identification in the Effects of Violent Video Games on Aggression in Adolescent Boys, 43 Developmental Psychology 1038 (2007).
- Krahé & Möller, Playing Violent Electronic Games, Hostile Attributional Style, and Aggression-related Norms in German Adolescents, 27 J. Adolescence 53 (2004).
- Krcmar, Farrar, & McGloin, The Effects of Video Game Realism on Attention, Retention and Aggressive Outcomes, 27 Computers in Human Behavior 432 (2011).
- Krcmar & Lachlan, Aggressive Outcomes and Videogame

- Play: The Role of Length of Play and the Mechanisms at Work, 12 Media Psychology 249 (2009).
- Krcmar & Farrar, Retaliatory Aggression and the Effects of Point of View and Blood in Violent Video Games, 12 Mass Communication & Society 115 (2009).
- Kronenberger et al., Media Violence Exposure in Aggressive and Control Adolescents: Differences in Self- and Parent-Reported Exposure to Violence on Television and in Video Games, 31 Aggressive Behavior 201 (2005).
- Kronenberger et al., Media Violence Exposure and Executive Functioning in Aggressive and Control Adolescents, 61 J. Clinical Psychology 725 (2005).
- Kuntsche, Hostility Among Adolescents in Switzerland? Multivariate Relations Between Excessive Media Use and Forms of Violence, 34 J. Adolescent Health 230 (2004).
- Lee, Peng, & Klein, Will the Experience of Playing a Violent Role in a Video Game Influence People's Judgments of Violent Crimes? 26 Computers in Human Behavior 1019 (2010).
- Lemmens & Bushman, The Appeal of Violent Video Games to Lower Educated Aggressive Adolescent Boys From Two Countries, 9 CyberPsychology & Behavior 638 (2006).
- Mathiak & Weber, Toward Brain Correlates of Natural Behavior: fMRI During VIolent Video Games, 27 Human Brain Mapping 948 (2006).
- Möller & Krahé, Exposure to Violent Video Games and Aggression in German Adolescents: A Longitudinal Analysis, 35 Aggressive Behavior 75 (2009).
- Nowak, Krcmar, & Farrar, The Causes and Consequences of Presence: Considering the Influence of Violent Video Games on Presence and Aggression, 17 Presence: Teleoperators & Virtual Environments 256 (2008).
- Olson et al., M-Rated Video Games and Aggressive or Problem Behavior Among Young Adolescents, 13 Applied

Appendix A to the opinion of Breyer, J.

- Developmental Science 188 (2009).
- Panee & Ballard, High Versus Low Aggressive Priming During Video-Game Training: Effects on Violent Action During Game Play, Hostility, Heart Rate, and Blood Pressure, 32 J. Applied Soc. Psychology 2458 (2002).
- Persky & Blascovich, Immersive Virtual Environments Versus Traditional Platforms: Effects of Violent and Nonviolent Video Game Play, 10 Media Psychology 135 (2007).
- Persky & Blascovich, Immersive Virtual Video Game Play and Presence: Influences on Aggressive Feelings and Behavior, 17 Presence: Teleoperators & Virtual Environments 57 (2008).
- Polman, de Castro, & van Aken, Experimental Study of the Differential Effects of Playing Versus Watching Violent Video Games on Children's Aggressive Behavior, 34 Aggressive Behavior 256 (2008).
- Potera, Sex and Violence in the Media Influence Teen Behavior: Three Studies Show a Correlation, 109 American J. Nursing 20 (2009).
- Richmond & Wilson, Are Graphic Media Violence, Aggression, and Moral Disengagement Related? 15 Psychiatry, Psychology & Law 350 (2008).
- Schaefer & Harrison, The Effects of Violent Fantasy on Children's Aggressive Behavior, 41 Psychology & Educ. 35 (2004).
- Schmierbach, "Killing Spree": Exploring the Connection Between Competitive Game Play and Aggressive Cognition, 37 Communication Research 256 (2010).
- Sheese & Graziano, Deciding to Defect: The Effects of Video-Game Violence on Cooperative Behavior, 16 Psychological Science: J. Am. Psychological Society 354 (2005).
- Sherry, The Effects of Violent Video Games on Aggression. A Meta-Analysis, 27 Human Communication Research 409 (2001).

- Shibuya, Sakamoto, Ihori, & Yukawa, The Effects of the Presence and Contexts of Video Game Violence on Children: A Longitudinal Study in Japan, 39 Simulation & Gaming 528 (2008).
- Sigurdsson, Gudjonsson, Bragason, Kristjansdottir, & Sigfusdottir, The Role of Violent Cognition in the Relationship Between Personality and the Involvement in Violent Films and Computer Games, 41 Personality & Individual Differences 381 (2006).
- Silvern & Williamson, The Effects of Video Game Play on Young Children's Aggression, Fantasy, and Prosocial behavior, 8 J. Applied Developmental Psychology 453 (1987).
- Slater, Henry, Swaim, & Cardador, Vulnerable Teens, Vulnerable Times: How Sensation Seeking, Alienation, and Victimization Moderate the Violent Media Content—Aggressiveness Relation, 31 Communication Research 642 (2004).
- Slater, Henry, Swaim, & Anderson, Violent Media Content and Aggressiveness in Adolescents: A Downward Spiral Model, 30 Communication Research 713 (2003).
- Staude-Müller, Bliesener, & Luthman, Hostile and Hardened? An Experimental Study on (De-)sensitization to Violence and Suffering Through Playing Video Games, 67 Swiss J. Psychology 41 (2008).
- Steward & Follina, Informing Policies in Forensic Settings: A Review of Research Investigating the Effects of Exposure to Media Violence on Challenging/Offending Behaviour, 8 British J. Forensic Prac. 31 (2006).
- Swing & Anderson, The Unintended Negative Consequences of Exposure to Violent Video games, 12 Int. J. Cognitive Tech. 3 (2007).
- Tamborini et al., Violent Virtual Video Games and Hostile Thoughts, 48 J. Broadcasting & Electronic Media 335 (2004).
- Uhlmann & Swanson, Exposure to Violent Video Games

Appendix A to the opinion of Breyer, J.

- Increases Automatic Aggressiveness, 27 J. Adolescence 41 (2004).
- Vaughan, Inadvertent Script Change and Increased Propensity for Violence: The Danger of Interactive Video Games, 34 Transactional Analysis J. 30 (2004).
- Wallenius & Punamäki, Digital Game Violence and Direct Aggression in Adolescence: A Longitudinal Study of the Roles of Sex, Age, and Parent-Child Communication, 29 J. Applied Developmental Psychology 286 (2008).
- Wallenius, Punamäki, & Rimpelä, Digital Game Playing and Direct and Indirect Aggression in Early Adolescence: The Roles of Age, Social Intelligence, and Parent-Child Communication, 36 J. Youth and Adolescence 325 (2007).
- Wang et al., Short Term Exposure to a Violent Video Game Induces Changes in Frontolimbic Circuitry in Adolescents, 3 Brain Imaging & Behavior 38 (2009).
- Weber, Ritterfeld, & Mathiak, Does Playing Violent Video Games Induce Aggression? Empirical Evidence of a Functional Magnetic Resonance Imaging Study, 8 Media Psychology 39 (2006).
- Wiegman & van Schie, Video Game Playing and its Relations With Aggressive and Prosocial Behaviour, 37 British J. Soc. Psychology 367 (1998).
- Williams, The Effects of Frustration, Violence, and Trait Hostility After Playing a Video Game, 12 Mass Communication & Society 291 (2009).
- Ybarra et al., Linkages Between Internet and Other Media Violence With Seriously Violent Behavior by Youth, 122 Pediatrics 929 (2008).

Appendix B to the opinion of Breyer, J.

В

- Bensley & Van Eenwyk, Video Games and Real-Life Aggression: Review of the Literature, 29 J. Adolescent Health 244 (2001).
- Bösche, Violent Content Enhances Video Game Performance, 21 J. Media Psychology: Theories, Methods, and Applications 145 (2009).
- Colwell & Kato, Video Game Play in British and Japanese Adolescents, 36 Simulation & Gaming 518 (2005).
- Colwell & Kato, Investigation of the Relationship Between Social Isolation, Self-Esteem, Aggression and Computer Game Play in Japanese Adolescents, 6 Asian J. Soc. Psychology 149 (2003).
- Dominick, Videogames, Television Violence, and Aggression in Teenagers, 34 J. Communication 136 (1984).
- Ferguson, Blazing Angels or Resident Evil? Can Violent Video Games be a Force For Good? 14 Rev. Gen. Psychology 68 (2010).
- Ferguson, Violent Video Games: Dogma, Fear, Pseudoscience, 33 Skeptical Inquirer 38 (2009).
- Ferguson, The Good, The Bad and the Ugly: A Metaanalytic Review of Positive and Negative Effects of Violent Video Games, 78 Psychiatric Q. 309 (2007).
- Ferguson & Meehan, Saturday Night's Alright for Fighting: Antisocial Traits, Fighting, and Weapons Carrying in a Large Sample of Youth, 81 Psychiatric Q. 293 (2010).
- Ferguson et al., Violent Video Games and Aggression, 35 Crim. Justice & Behavior 311 (2008).
- Ferguson, Research on the Effects of Violent Video Games: A Critical Analysis, 3 Soc. & Personality Psychology Compass 351 (2009).
- Ferguson & Rueda, The Hitman Study: Violent Video Game Exposure Effects on Aggressive Behavior, Hostile Feelings, and Depression, 15 European Psychologist 99 (2010).

- Ferguson, San Miguel, & Hartley, A Multivariate Analysis of Youth Violence and Aggression: The Influence of Family, Peers, Depression, and Media Violence, 155 J. Pediatrics 904 (2009).
- Ferguson, Evidence for Publication Bias in Video Game Violence Effects Literature: A Meta-Analytic Review, 12 Aggression & Violent Behavior 470 (2007).
- Ferguson, The School Shooting/Violent Video Game Link: Causal Relationship or Moral Panic? 5 J. Investigative Psychology & Offender Profiling 25 (2008).
- Ferguson et al., Personality, Parental, and Media Influences on Aggressive Personality and Violent Crime in Young Adults, 17 J. Aggression, Maltreatment & Trauma 395 (2008).
- Ferguson & Kilburn, Much Ado About Nothing: The Misestimation and Overinterpretation of Violent Video Game Effects in Eastern and Western Nations: Comment on Anderson et al. (2010), 136 Psychological Bull. 174 (2010).
- Fleming & Rickwood, Effects of Violent Versus Nonviolent Video Games on Children's Arousal, Aggressive Mood, and Positive Mood, 31 J. Applied Soc. Psychology 2047 (2001).
- Griffiths, Violent Video Games and Aggression: A Review of the Literature, 4 Aggression & Violent Behavior 203 (1999).
- Griffiths, Video Games and Aggression, 10 The Psychologist 397 (1997).
- Ivory & Kalyanaraman, The Effects of Technological Advancement and Violent Content in Video Games on Players' Feelings of Presence, Involvement, Physiological Arousal, and Aggression, 57 J. Communication 532 (2007).
- Kestenbaum & Weinstein, Personality, Psychopathology, and Developmental Issues in Male Adolescent Video Game Use, 24 J. Am. Academy Child Psychology 329 (1985).

- Markey & Markey, Vulnerability to Violent Video Games: A Review and Integration of Personality Research, 14 Rev. Gen. Psychology 82 (2010).
- Markey & Scherer, An Examination of Psychoticism and Motion Capture Controls as Moderators of the Effects of Violent Video Games, 25 Computers in Human Behavior 407 (2009).
- Mitrofan, Paul, & Spencer, Is Aggression in Children With Behavioural and Emotional Difficulties Associated With Television Viewing and Video Game Playing? A Systematic Review, 35 Child: Care, Health & Development 5 (2009).
- Olson, Media Violence Research and Youth Violence Data: Why Do They Conflict? 28 Academic Psychiatry 144 (2004).
- Porter & Starcevic, Are Violent Video Games Harmful? 15 Australasian Psychiatry 422 (2007).
- Regenbogen, Herrmann, & Fehr, 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 (2010).
- Scott, The Effect of Video Games on Feelings of Aggression, 129 J. Psychology 121 (1995).
- Sestir & Bartholow, Violent and Nonviolent Video Games Produce Opposing Effects on Aggressive and Prosocial Outcomes, 46 J. Experimental Soc. Psychology 934 (2010).
- Unsworth, Devilly, & Ward, The Effect of Playing Violent Video Games on Adolescents: Should Parents be Quaking in Their Boots? 13 Psychology, Crime & Law 383 (2007).
- Unsworth & Ward, Video Games and Aggressive Behavior. 36 Australian Psychologist 184 (2001).
- Williams & Skoric, Internet Fantasy Violence: A Test of Aggression in an Online Game, 72 Communication

Appendix B to the opinion of Breyer, J.

Monographs 217 (2005).

Winkel, Novak, & Hopson, Personality Factors, Subject Gender, and the Effects of Aggressive Video Games on Aggression in Adolescents, 21 J. Research in Personality 211 (1987).