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Social Science, Media Effects & The Supreme Court: Is Communication Research Relevant After *Brown v. Entertainment Merchants Association*?

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This Article examines the implications of the U.S. Supreme Court’s 2011 ruling in *Brown v. Entertainment Merchants Association* for the future use of social science evidence and communication research to supply legislative facts supporting laws that target harms allegedly caused by media artifacts. The Brown majority set the bar for the relevance of social science evidence exceedingly high – perhaps too high, the article suggests – while Justice Stephen Breyer, in contrast, adopted a much more deferential approach in a dissent that embraced the evidence proffered by California. The article also reveals an apparent inconsistency in Justice Antonin Scalia’s approach to social evidence when comparing his majority opinion in Brown against his

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opinion just two years earlier in Federal Communications Commission v. Fox Television Stations, Inc. Ultimately, the article asserts that communication scientists hoping to influence both legislative bodies and jurists should view Brown as a wake-up call to do two things: 1) educate lawmakers and jurists about whether and when social science research can adequately resolve complex questions about media-caused harms; and 2) jettison research that lacks real-world generalizability and legal relevance.

I. INTRODUCTION

The use of social science data as evidence within the American legal system has a storied history. For instance, the U.S. Supreme Court’s decision in Brown v. Board of Education\(^1\) cited social science evidence\(^2\) to support the conclusion that separating children in both grade schools and high schools “from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone.”\(^3\)

In fact, ever since Louis Brandeis and Josephine Goldmark filed a brief more than 100 years ago packed with sociological data – some of

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\(^2\) See id. at 494 n.11 (identifying multiple studies relating to the psychological effects of forced segregation).

\(^3\) Id. at 494.
which, in hindsight, appears to have been of questionable persuasive value— in the employment law case of Muller v. Oregon, the term “Brandeis Brief”—heavy on social science data and policy analysis, light on legal citation—has been a staple of American argument. Fast-forward a century after Muller to the Internet era and one finds, as Judge Cathy Cochran of the Texas Court of Criminal Appeals recently wrote, that “both practitioners and judges are referring to more sociology, psychology, criminology, medical, and economics texts and journals and to more nonacademic books, magazines, and newspapers.”

One particular deployment of social science is to supply so-called legislative facts, meaning facts “not relating to the immediate parties but instead underlying decisions about law and policy.” Legislative facts, a term coined seventy years ago by Kenneth Culp Davis, thus inform lawmakers when adopting statutes. Legislative facts, as

4 As one law professor recently wrote:

Brandeis’s brief, rather than being a social science masterpiece, consisted largely of a “hodgepodge” of reports of factory or health inspectors, testimony before legislative investigating committees, statutes, and quotes from medical texts, among other miscellany. Some of the “scientific” arguments presented in the brief are nonsensical, even given the state of medical knowledge at the time. For example, the brief reports that “there is more water” in women’s than in men’s blood and women therefore are “inferior to men” in certain physical tasks, and that women’s knees are constructed in such a way as to prevent them from engaging in difficult physical tasks.

David E. Bernstein, Brandeis Brief Myths, 15 GREEN BAG 2D 9, 12 (2011). See also Clyde Spillenger, Revenge of the Triple Negative: A Note on the Brandeis Brief in Muller v. Oregon, 22 CONST. COMMENT. 5, 6 (2005) (observing that “the brief is now regarded by many scholars as relying on a highly selective presentation of ‘scientific’ studies that by modern standards seem biased and amateurish”).


6 Bernstein, supra note 4, at 10.


8 Cathy Cochran, Surfing the Web for a “Brandeis Brief”: The Internet and Judicial Use of Legislative Facts, 70 TEX. B. J. 780, 781 (2007).


11 See FED. R. EVID. 201 advisory committee’s note (observing that legislative facts “are those which have relevance to legal reasoning and the lawmaking process, whether in the
Richard B. Cappalli asserts, also provide “information which helps judges execute their lawmaking function.”

One subset of social science research that can supply such legislative facts is communication research—in particular, communication science. More than two decades ago, communication scholars Jeremy Cohen and Timothy Gleason called for “an interdisciplinary approach to communication and law” that would serve as “a means of raising basic questions about communication assumptions inherent in the law” and determine “suitable means for identifying those assumptions and for testing both their scientific and their legal validity.” These, however, are far from easy tasks. As Professors Matthew Bunker and David Perry of the University of Alabama note, “ translating social scientific findings into the domain of existing First Amendment doctrine is a daunting problem.”

Indeed, the task proved particularly daunting for the state of California in Brown v. Entertainment Merchants Association in 2011, when it unsuccessfully relied on social science evidence to justify a law restricting minors’ access to violent video games. In an article

formulation of a legal principle or ruling by a judge or court or in the enactment of a legislative body.”


13 JEREMY COHEN & TIMOTHY GLEASON, SOCIAL RESEARCH IN COMMUNICATION AND LAW 19 (1990) (writing that “[c]ommunication is a discipline in the social sciences,” and remarking on “[t]he usually lax use of communication and social science as synonymous terms within the legal context”).


15 COHEN & GLEASON, supra note 13, at 13.

16 Id. at 12.

17 Id.


20 See CAL. CIV. CODE § 1746 (2010) (providing, in relevant part, California’s statutory definition of a violent video game); CAL. CIV. CODE § 1746.1 (2010) (providing, in relevant part, that “[a] person may not sell or rent a video game that has been labeled as a violent video game to a minor,” but carving out an exemption if the game “is sold or rented to a minor by the minor’s parent, grandparent, aunt, uncle, or legal guardian”); CAL. CIV. CODE § 1746.2 (2010) (requiring that “[e]ach violent video game that is imported into or distributed in California for retail sale shall be labeled with a solid white ‘18’ outlined in black,” and specifying that “[t]he
published shortly before the U.S. Supreme Court rendered its June 2011 ruling in Brown, Professor Deana Pollard Sacks presciently predicted that the High Court’s decision in Brown “should shed some light on the Court’s agenda relative to . . . how social science and legislative fact-finding will affect constitutional norms produced by the Roberts Court concerning children.”

The foci of this Article are the Court’s treatment of social science evidence in Brown and, in particular, what the decision portends in the near future for the deployment of such evidence in First Amendment-based cases where speech products allegedly cause harm. Part II demonstrates that, per Professor Sacks’ prediction, Brown casts much light on how several members of the Court consider and weigh the utility of social science evidence on at least one hot-button media effects question, namely the effect on minors of playing violent video games. Perhaps more troubling, however, the case also reveals a deep division among some of the justices on the quantum of social science proof necessary for the government to establish the existence of a compelling interest in safeguarding minors under the rigorous strict scrutiny standard of judicial review. Part III then highlights an
apparent internal inconsistency for Justice Scalia, author of the majority opinion in Brown, when it comes to the relationship between social science evidence and harm to minors. Next, Part IV asserts that the majority’s analysis in Brown could severely reduce the utility of media effects research in terms of providing the legislative facts upon which speech-restrictive statutes are premised.

Lastly, the Article concludes in Part V by arguing that communication scientists who hope to influence legislative bodies and jurists should view Brown as a wake-up call rather than as an outright defeat. In particular, they should assume the mission of educating both legislators and jurists about whether and when social science research can adequately resolve complex questions about the harm allegedly wrought by any given type or mode of media content. By taking on these educational functions in a neutral and detached manner that openly admits potential shortcomings and pitfalls of their work and, in addition, by jettisoning research that lacks both real-world generalizability and legal relevance to the issues at hand in cases like Brown, communication scientists in the media effects tradition can begin to earn the type of deference from jurists that will render their work important in legal decision making for years to come.

II. REJECTING SOCIAL SCIENCE EVIDENCE IN BROWN: A RIGOROUS STANDARD OF CAUSATION AND COMPELLING EVIDENCE

“Violent video games teach kids how to shoot, maim and hurt people, and they learn how to execute some of these atrocious behaviors without emotions.”

restricting such content generally are subjected to strict scrutiny, the standard typically applied to content based restrictions on fully protected speech” and that “Under strict scrutiny, the government must show that a restriction is necessary to achieve a compelling government interest and that the restriction is narrowly drawn to achieve that end”).

25 See infra notes 97–113 and accompanying text.

26 See infra notes 114–166 and accompanying text.

27 See infra notes 167–183 and accompanying text.

That is what Leland Yee, then a California assemblyman who later launched an ill-fated bid to become mayor of San Francisco, proclaimed back in 2004 when introducing two bills that, after initial failures, ultimately would lead to the law at issue in Brown v. Entertainment Merchants Association. During one key committee hearing in April 2005, Yee reportedly “cited research that found a link between repeated use of violent video games and violent behavior in children.” Later, when then-California Governor Arnold Schwarzenegger signed Assembly Bill 1179 into law in October 2005, Yee trumpeted that “study upon study shows that these ultraviolent games have harmful effects on our children.”

In brief, Yee argued that extant social science evidence demonstrated the urgent need for his speech-restrictive legislation. That legislation required the labeling, with a solid white “18” outlined in black, of all violent video games imported into or distributed in California, and also made it an offense, punishable by up to a $1000 fine, to “sell or rent a video game that has been labeled as a violent game that has been labeled as a violent

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29 Yee later became a California state senator. See Biography, SENATOR LELAND YEE, Ph.D., http://sd08.senate.ca.gov/biography (last visited June 17, 2012) (providing, in relevant part, that “[a]fter serving four years in the California State Assembly, Leland Yee was elected to the State Senate in November 2006 with the largest winning percentage for any Democratic candidate with a Republican challenger, and adding that in 2010, he “was re-elected, receiving the most votes of any Democratic legislator in the State and garnering the largest winning percentage of any candidate on the ballot in San Francisco.”).

30 See John Diaz, Takeaways from the Election, S.F. CHRON., Nov. 13, 2011, at E3 (noting that while Yee was “once considered the front-runner” in the mayoral race, “he finished a distant fifth, with less than 8 percent of the first-place votes”).

31 See Lynda Gledhill, Video Games Bills Fail, S.F. CHRON., Apr. 14, 2004, at B3 (reporting that “two bills aimed at keeping violent video games out of the hands of minors were defeated during their first legislative test”).


35 CAL. CIV. CODE § 1746.2 (2010).

36 See CAL. CIV. CODE § 1746.3 (2010) (providing that “[a]ny person who violates any provision of this title shall be liable in an amount of up to one thousand dollars ($1000), or a lesser amount as determined by the court,” but adding that “this liability shall not apply to any person who violates those provisions if he or she is employed solely in the capacity of a salesclerk or other, similar position and he or she does not have” an ownership or managerial interest in the business).
video game to a minor." The real question, of course, was whether the social science research would hold up in a court of law, not merely in the realm of politically motivated soundbites.

### A. The Social Science Evidence at Issue in Brown

The social science research in question in *Brown* consisted largely of the work of Dr. Craig Anderson. Dr. Anderson is a distinguished professor of psychology at Iowa State University, where he heads the Center for the Study of Violence. He has conducted research on violent media content for more than 20 years. In 2000, while working at the University of Missouri, Dr. Anderson published an article calling on social scientists to “add new research to the currently small and imperfect literature on video game violence effects and clarify for society exactly what these risks entail.”

Among his works is the 2007 tome *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy*. More recently, Dr. Anderson and several fellow researchers published a meta-analysis on video game effects in which they concluded that exposure to violent video games:

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37 CAL. CIV. CODE § 1746.1(a) (2010).


39 Dr. Anderson’s vita is available online at http://www.psychology.iastate.edu/faculty/caa/Vita.pdf.

40 The Center’s primary objectives are to improve the scientific knowledge base about the “[f]actors that contribute to the development of aggression and violence-prone individuals versus factors that promote development of healthy, productive citizens” and “[o]ther situational and environmental factors that increase or decrease the likelihood of aggression and violence.” *Overview*, CENTER FOR THE STUDY OF VIOLENCE, http://www.psychology.iastate.edu/faculty/caa/csv/Overview.htm (last visited June 17, 2012).

41 Brad J. Bushman et al., *Much Ado About Something: Violent Video Game Effects and a School of Red Herring: Reply to Ferguson and Kilburn* (2010), 136 PSYCHOL. BULL. 182, 182 (2010) (writing, in an article co-authored by Dr. Craig Anderson, that “[t]he three authors who wrote this reply have considerable expertise in conducting violent media research, in meta-analysis, or in both (as do the other authors on our meta-analysis). Two of us (Anderson and Bushman) have been conducting research on violent media (including violent video games) for at least 20 years”) (emphasis added).

42 Craig A. Anderson & Karen E. Dill, *Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life*, 78 J. PERSONALITY & SOC. PSYCHOL. 772, 789 (2000).

was positively associated with aggressive behavior, aggressive cognition, and aggressive affect. These effects were statistically reliable in experimental, cross-sectional, and longitudinal studies, even when unusually conservative statistical procedures were used. Also as expected, VVG [violent video game] exposure was related to desensitization and lack of empathy and to lack of prosocial behavior.\textsuperscript{44} 

Additionally, outside of academia, Dr. Anderson’s research on violent video games has captured mainstream newspaper headlines across the nation.\textsuperscript{45} His early work on violent video games effects, in fact, was used to justify an ill-fated Indianapolis, Indiana, ordinance enacted in 2000.\textsuperscript{46} One year later, the U.S. Court of Appeals for the Seventh Circuit held in \textit{American Amusement Machine Association v. Kendrick} that Dr. Anderson’s studies:

\begin{quote}
do not support the ordinance. There is no indication that the games used in the studies are similar to those in the record of this case or to other games likely to be marketed in game arcades in Indianapolis. The studies do not find that video games have ever caused anyone to commit\end{quote}

\textsuperscript{44} Craig A. Anderson et al., \textit{Violent Video Game Effects on Aggression, Empathy, and Prosocial Behavior in Eastern and Western Countries: A Meta-Analytic Review}, 136 PSYCHOL. BULL. 151, 167 (2010). A meta-analysis “is a statistical technique used to aggregate study findings in a given area of research” that “holds the promise of providing researchers with both an estimate of an overall mean effect size (ES) across multiple studies and a level of precision of such an estimate across repeated trials under differing conditions.” Ashley E. Anker et al., \textit{Meta-Analysis of Meta-Analyses in Communication: Comparing Fixed Effects and Random Effects Analysis Models}, 58 COMM. Q. 257, 258 (2010).

\textsuperscript{45} See, e.g., H.J. Cummins, \textit{Ratings Debate Rages as Adult Video Games End Up in Kids’ Hands}, STAR TRIB. (Minneapolis), Dec. 20, 2002, at 1A (asserting that “[o]ne of the newest, biggest collections of research comes from Craig Anderson and Brad Bushman,” and quoting Anderson for the proposition that “I like to tell parents to think of playing video games as learning, practicing how to respond. And it increases the likelihood youngsters are going to react to conflict with aggression instead of cooperation”); Sharon Jayson, \textit{Video Games Tied to Aggression}, \textit{USA Today}, Mar. 1, 2010, at 1A (citing a study by Dr. Craig Anderson that involved “a statistical analysis of studies on more than 130,000 gamers from elementary school age to college in the USA, Europe and Japan”); Karen Patterson, \textit{Piling on the Violence: Link Between Media and Aggression Clear, Experts Say}, \textit{Dallas Morning News}, Apr. 12, 2004, at 1E (quoting Dr. Craig Anderson for the propositions that “the research is clear, it’s solid, it’s consistent, that there are these harmful effects” and that those “harmful effects occur in both the short term and the long term. And the harmful effects are large enough that we as a society should be concerned”).

\textsuperscript{46} See Am. Amusement Mach. Ass’n v. Kendrick, 244 F.3d 572, 578 (7th Cir. 2001) (observing that “[t]he social science evidence on which the City relies consists primarily of the pair of psychological studies that we mentioned earlier, which are reported in Craig A. Anderson & Karen E. Dill, \textit{Personality Processes and Individual Differences—Video Games and Aggressive Thoughts, Feelings, and Behavior in the Laboratory and in Life},” 78 J. PERSONALITY & SOC. PSYCH. 772 (2000)).
a violent act, as opposed to feeling aggressive, or have caused the average level of violence to increase anywhere. And they do not suggest that it is the interactive character of the games, as opposed to the violence of the images in them, that is the cause of the aggressive feelings.\(^{47}\)

With this background on Dr. Anderson and his research in mind, the Article now turns to the Supreme Court’s consideration in \textit{Brown} of the evidence proffered by California.

\section*{B. The Majority’s Analysis of the Social Science Research}

The previously mentioned judicial beat-down in \textit{Kendrick} proved to be a harbinger of things to come for Dr. Anderson’s studies throughout the next ten years,\(^{48}\) culminating in 2011 before the U.S. Supreme Court in \textit{Brown}. In analyzing the social science evidence proffered by California in \textit{Brown}, Justice Scalia initially articulated several key principles that would guide the majority’s analysis:

- The social science evidence must be “compelling”\(^{49}\) in order to demonstrate that there is an “actual problem”\(^{50}\) that requires curtailing otherwise protected expression.

- Compelling evidence, in turn, requires much more than “ambiguous proof”\(^{51}\) of an alleged harm when the law in question, like California’s in \textit{Brown}, constitutes a content-based restriction.

\footnotesize
\begin{itemize}
\item \textit{Id.} at 578-79.
\item For instance, before \textit{Brown} reached the U.S. Supreme Court, the U.S. Court of Appeals for the Ninth Circuit wrote in 2009 when considering the same California law and the state’s citation of Dr. Craig Anderson’s research to support it:

Dr. Anderson’s research has readily admitted flaws that undermine its support of the State’s interest in regulating video games sales and rentals to minors, perhaps most importantly its retreat from the study of the psychological effects of video games as related to the age of the person studied. Although not dispositive of this case, we note that other courts have either rejected Dr. Anderson’s research or found it insufficient to establish a causal link between violence in video games and psychological harm.


\item \textit{See} \textit{Brown v. Entm’t Merch. Ass’n}, 131 S. Ct. 2729, 2739 (2011) (finding that “[t]he State’s evidence is not compelling”).

\item \textit{Id.} at 2738 (quoting United States v. Playboy Entm’t Grp., 529 U.S. 803, 822 (2000)).

\item \textit{Id.} at 2739 (asserting that “ambiguous proof will not suffice”).
\end{itemize}
• Compelling evidence demands such a “degree of certitude”\textsuperscript{52} that the social science data must demonstrate actual \textit{causation}\textsuperscript{53} of harm rather than a mere positive \textit{correlation}\textsuperscript{54} between the speech and alleged injury wrought by it.\textsuperscript{55}

• The social science data must demonstrate a distinct difference between the negative effects of exposure to the \textit{regulated} speech in question—in \textit{Brown}, violent video games—and the negative effects of exposure to similarly situated \textit{unregulated} speech, such as televised violence.\textsuperscript{56}

• The social science data must possess external validity\textsuperscript{57} such that they are relevant to the legal issue and must demonstrate more than “minuscule real-world effects, such as children’s feeling more aggressive or making louder noises in the few minutes after

\textsuperscript{52} \textit{Id.} at 2739 n.8.

\textsuperscript{53} A causal relationship exists when “the alterations in a particular variable under specific conditions always produces the same effect in another variable.” \textsc{Stanley J. Baran \\ & Dennis K. Davis}, \textsc{Mass Communication Theory: Foundations, Ferment, and Future} 25 (3d ed. 2003). Causality is not an easy concept to neatly define. \textsc{See Steven M. Shugan}, \textit{Causality, Unintended Consequences and Deducing Shared Causes}, 26 \textsc{Marketing Sci.} 731, 732 (2007) (writing that “[a]fter thousands of years, at least since the inception of Aristotle’s four causal types, scholars continue to debate the meaning and implications of causality. Incredibly, this deceptively simple concept apparently remains elusive, as misconceptions, conflicting approaches, and fundamental disagreements thwart the investigation of causality.”).

\textsuperscript{54} \textsc{See Joann Keyton}, \textsc{Communication Research: Asking Questions, Finding Answers} 230–31 (3d ed. 2011) (writing that “[c]orrelation is limited to finding a relationship for two variables” and “correlation does not \textit{necessarily} equal causation”) (emphasis added).

\textsuperscript{55} \textit{Brown}, 131 S. Ct. at 2738–39 (noting that California “acknowledges that it cannot show a direct causal link between violent video games and harm to minors,” and holding that the studies in question have correctly been rejected by all of the courts that had thus far considered them because “[i]t[hey] do not prove that violent video games \textit{cause} minors to \textit{act} aggressively (which would at least be a beginning).”)

\textsuperscript{56} Justice Scalia opined:

\begin{quote}
Even taking for granted Dr. Anderson’s conclusions that violent video games produce some effect on children’s feelings of aggression, those effects are both small and indistinguishable from effects produced by other media. In his testimony in a similar lawsuit, Dr. Anderson admitted that the “effect sizes” of children’s exposure to violent video games are “about the same” as that produced by their exposure to violence on television.
\end{quote}

\textit{Id.} at 2739.

\textsuperscript{57} External validity is “the measure of a particular study’s generalizability.” \textsc{Jennings Bryant \\ & Susan Thompson}, \textsc{Fundamentals of Media Effects} 15 (2002).
playing a violent game than after playing a nonviolent game."  \(^{58}\)

On this last point, Justice Scalia made it clear that contrived labor-
atory experiments can be so far removed from the legal issue facing a
court as to be rendered irrelevant. He observed in Brown that one
study cited by California “found that children who had just finished
playing violent video games were more likely to fill in the blank letter
in ‘explo e’ with a ‘d’ (so that it reads ‘explode’) than with an ‘r’
(‘explore’). . . . The prevention of this phenomenon, which might have
been anticipated with common sense, is not a compelling state
interest."  \(^{59}\)

Justice Scalia’s citation of the above-mentioned study demon-
strates the often vast disconnect between social science experiments
that employ surrogate measures or analogs that purport to tap into the
effects of violent video games on one hand, and the speech-restrictive
laws that are premised on the notion that playing violent video games
causes real-world violence and aggression on the other. Put more
bluntly, the legal system simply does not care if a child fills in a blank
space with a particular letter. Instead, it wants to know whether real-
world speech phenomena—namely in Brown, playing violent video
games—cause violence. Fill-in-the-blank letter games are simply
that—letter games, not video games.

Justice Scalia also made it clear that merely finding a statistically
significant effect is not enough to support a compelling interest in
censoring expression. Instead, it is the size of the effect that matters,
with Justice Scalia emphasizing that a finding of small effects which
are indistinguishable from the effects of other media artifacts that
society typically views as benign will not suffice for constitutional
purposes.  \(^{60}\)

Applying these guidelines and requirements, the majority had little
difficulty in finding that “some of the evidence brought forward to
support the harmfulness of video games is unpersuasive”  \(^{61}\) and that the
law was not “justified by that high degree of necessity we have de-

\(^{58}\) Brown, 131 S. Ct. at 2739.

\(^{59}\) Id. at 2739 n.7.

\(^{60}\) Justice Scalia wrote that Dr. Anderson “admits that the same effects have been found
when children watch cartoons starring Bugs Bunny or the Road Runner . . . or when they play
video games like Sonic the Hedgehog that are rated ‘E’ (appropriate for all ages) . . . or even
when they ‘view a picture of a gun.’” Id. at 2739 (citations omitted).

\(^{61}\) Id. at 2741.
scribed as a compelling state interest.”

In brief, “[t]he State’s evidence is not compelling.” Perhaps rubbing salt into the social science wound, Justice Scalia concluded that the law “abridges the First Amendment rights of young people whose parents (and aunts and uncles) think violent video games are a harmless pastime.” In other words, the belief of an average parent regarding the harmlessness of playing violent video games trumps, from a constitutional perspective, the current state of scholarly, social science data.

C. Justice Breyer’s Dissent: A Matter of Deference

Not all of the justices, however, adopted the majority’s position on the social science question. Most notably, Justice Breyer authored a dissent, replete with two lengthy appendixes listing peer-reviewed articles about the alleged harm resulting from playing violent video games that reached the opposite conclusion about the nature of the social science data. Justice Breyer’s embracement of the social science evidence is best understood, perhaps, by one concept—deference. In particular, Justice Breyer deferred to the judgment of: 1) social scientists; 2) professional organizations that address health and safety issues; and 3) California lawmakers. In a key paragraph, Justice Breyer staked out the heart of the deference argument regarding the first two of these three groups:

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

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62 Id.
63 Id. at 2739.
64 Id. at 2742.
65 Id. at 2761–79 (Breyer, J., dissenting).
66 See Paul Horwitz, Three Faces of Deference, 83 Notre Dame L. Rev. 1061, 1078 (2008) (defining deference “as a decisionmaker’s decision to follow a determination made by some other individual or institution that it might not otherwise have reached had it decided the same question independently”).
67 See infra notes 68–82 and accompanying text (supporting these propositions).
children harm.\textsuperscript{58}

In other words, Justice Breyer deferred, letting associations of public health professionals serve as the arbiters of the value and merit of social science data produced by researchers such as Dr. Anderson. Justice Breyer, for instance, cited reports and statements by groups including the American Academy of Pediatrics, American Psychological Association, the American Medical Association, and the American Academy of Family Physicians.\textsuperscript{69}

He then followed up this dose of deference to research and professional experts with a deep bow of legislative deference, writing that:

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. This 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.\textsuperscript{70}

In contrast, Justice Breyer criticized the majority in his dissenting opinion for granting “the legislature no deference at all.”\textsuperscript{71} Justice Scalia responded in a footnote, writing that the majority could not fathom how Justice Breyer could conclude that California had proven a compelling interest since Justice Breyer “admits he cannot say whether the studies on his side are right or wrong.”\textsuperscript{72}

Ultimately, disagreement within the social science community on the effects of playing violent video games did not trouble or otherwise bother Justice Breyer, as he frankly acknowledged that “[e]xperts debate the conclusions of all these studies.”\textsuperscript{73} For Justice Breyer, the threshold or quantum of social science proof necessary to support a compelling interest in protecting minors from harm is whether there is “considerable evidence”\textsuperscript{74} or “substantial (though controverted) evidence” supporting the expert associations of public health profes-

\textsuperscript{58} \textit{Brown}, 131 S. Ct. at 2769 (Breyer, J., dissenting) (emphasis added).

\textsuperscript{69} \textit{Id}. at 2769-70 (Breyer, J., dissenting).

\textsuperscript{70} \textit{Id}. at 2770 (emphasis added).

\textsuperscript{71} \textit{Id}.

\textsuperscript{72} \textit{Id}. at 2739 n.8.

\textsuperscript{73} \textit{Id}. at 2769 (Breyer, J., dissenting).

\textsuperscript{74} See \textit{id}. at 2767 (Breyer, J., dissenting) (finding that “there is considerable evidence that California’s statute significantly furthers this compelling interest”) (emphasis added).
This standard is different from that used by the majority, as Justice Scalia required that the studies demonstrate "the degree of certitude that strict scrutiny requires."6

Justice Breyer’s embracement of deference to those with more expertise in a particular area than justices and judges has percolated previously in other First Amendment cases. For instance, in the inmate-speech case of Beard v. Banks,77 Justice Breyer wrote in announcing the judgment of the court that “we must distinguish between evidence of disputed facts and disputed matters of professional judgment. In respect to the latter, our inferences must accord deference to the views of prison authorities.”

In reversing the opinion of the U.S. Court of Appeals for the Third Circuit in Beard, Breyer chided the Third Circuit for “offer[ing] too little deference to the judgment of prison officials about such matters. The court, for example, offered no apparent deference to the deputy prison superintendent’s professional judgment that the Policy deprived ‘particularly difficult’ inmates of a last remaining privilege and that doing so created a significant behavioral incentive.”79

Ultimately, whether Justice Breyer granted deference to social scientists, prison officials, and/or legislative bodies, the outcome for him in both Brown and Beard was the same—pro-censorship and anti-free speech. Furthermore, Justice Breyer has embraced deference to legislative bodies in the area of campaign-finance regulations, with Professor Lillian R. BeVier remarking in a 2005 law journal article that Breyer has “stated that the Court owed a large degree of deference to such regulations because they embody the legislature’s answers regarding ‘empirical matters about which [it] is comparatively expert.’”80 Professor Paul Gewirtz, when reviewing Justice Breyer’s book Active Liberty,81 commented on Justice Breyer’s “deference to the

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75 Id. at 2772 (Breyer, J., dissenting) (emphasis added).
76 Id. at 2739 n.8 (emphasis added). See supra Part II.B (describing the Scalia-authored majority approach to the social science evidence).
78 Id. at 530.
79 Id. at 535.
81 STEPHEN BREYER, ACTIVE LIBERTY: INTERPRETING OUR DEMOCRATIC CONSTITUTION
choices made by other institutions (for example, deference to Congress on campaign finance legislation, deference to Congress on Commerce Clause and related federalism questions, deference to the University of Michigan Law School on affirmative action).”

Justice Breyer’s tolerance for disagreement within the social science community on the effects of playing violent video games also may reflect his general balancing approach toward First Amendment issues. In particular, he can tolerate ambiguity and, in turn, weigh the pros and cons of conflicting research results before coming down on one side, especially when multiple professional organizations possessing expertise within a field are unified in their view.

D. Justice Alito’s Concurrence: Setting the Bar Too High?

Justice Samuel Alito authored a concurring opinion in Brown that was joined by Chief Justice John Roberts. Alito agreed with the majority that the California law was unconstitutional, but he reached that result on the grounds of statutory vagueness and lack of notice caused by its poor drafting. In the process, he intimated that the majority may have set the bar for social science evidence unrealistically high. Specifically, Justice Alito wrote that:

"[T]he Court’s sweeping opinion will likely be read by many, both inside and outside the video-game industry, as suggesting that no regulation of minors’ access to violent video games is allowed—at least without supporting evidence that may not be realistically obtainable given the nature of the phenomenon in question."


84 See supra notes 68–69 (providing support for this proposition).


86 See id. at 2746 (Alito, J., concurring) (concluding “that the California violent video game law fails to provide the fair notice that the Constitution requires. And I would go no further. I would not express any view on whether a properly drawn statute would or would not survive First Amendment scrutiny”). See generally Cristina D. Lockwood, Defining Indefiniteness: Suggested Revisions to the Void for Vagueness Doctrine, 8 CARDozo PUB. L. POL’Y & ETHICS J. 255 (2010) (describing the relationship between the void for vagueness doctrine and the principle of fair notice).

87 Brown, 131 S. Ct. at 2747 (Alito, J., concurring) (emphasis added).
The emphasized portion of Justice Alito’s assertion is important because it recognizes that there are limitations to social science research, such as the problem of establishing a direct causal relationship. As Professor Alan Garfield writes, “the difficulty of proving a definitive causal connection between speech and harm should give courts pause before invalidating child-protection censorship legislation for lack of empirical proof.”

Professor Garfield adds:

“Proving a causal connection between speech and children’s emotions or antisocial behavior is not something that lends itself to empirical analysis. Children are subject to so many influences—their parents, their teachers, their peers, poverty, and crime—that it is difficult to isolate any particular variable as the source of their troubles. While social scientists have tried to establish these connections, their results are often inconclusive.”

Although not explicitly mentioned in his concurrence, Justice Alito also might have been suggesting that it would be highly unlikely for the institutional review board (IRB) of any university to approve a study that exposes young children to content that might cause them harm or that requires the university to obtain the consent of their parents. The bottom line is that Justice Alito appeared to disagree with the rigorous demands the majority imposed on social science data, suggesting that, like Justice Breyer, he might be more deferential to social scientists and state legislative bodies.

The authors of this Article note that Justice Alito seemed to take what might be called a descriptive approach—rather than an experimental or survey-based tack—to support the notion that violent video games are dangerous for minors. In particular, Justice Alito used considerable ink describing the graphic violence and life-like images in some games.

For instance, Justice Alito wrote:

89 Id. at 608–09.
90 Cf. Clay Calvert & Matthew D. Bunker, Free Speech, Fleeting Expletives, and the Causation Quagmire: Was Justice Scalia Wrong in Fox Television Stations?, 47 SAN DIEGO L. REV. 737, 746 (2010) (asserting, with regard to the issue of whether broadcast indecency harms minors, that “[i]t is highly unlikely that the human subjects committee or institutional review board (IRB) of any department, college, or university would approve a study that exposes children—however old or young they may be—to words like shit, cunt, and fuck”).
91 Brown, 131 S. Ct. at 2748–50 (Alito, J., concurring).
In some of these games, the violence is astounding. Victims by the
dozens are killed with every imaginable implement, including machine
guns, shotguns, clubs, hammers, axes, swords, and chainsaws. Victims
are dismembered, decapitated, disemboweled, set on fire, and chopped
into little pieces. They cry out in agony and beg for mercy. Blood
gushes, splatters, and pools.92

Perhaps the purpose of this descriptive tack was to buttress the
social science evidence; in other words, one might be left to wonder
after reading Justice Alito’s descriptions, “How could these games not
cause violence and aggression in minors?” Put more cynically, “Who
needs social science evidence? The games are just too shockingly
violent and offensive in the first place.”

E. Summary

When it comes to the relevance of social science data in supporting
a compelling interest to restrict free speech rights, a five-justice
majority of the Court in Brown adopted an extremely rigorous standard
that demands both causation and certitude, as well as large effects that
actually possess real-world significance.93 In contrast, Justice Breyer
offered a much more deferential approach that is more accepting of
social science data—even if there is a disagreement among
researchers—provided that there is considerable and substantial
evidence that has been endorsed and approved by relevant professional
organizations.94 Finally, Justice Alito questioned whether the standard
established by Justice Scalia and the majority was too high, suggesting
he might endorse a more balanced approach like that of Justice Breyer,
although he did not join in Justice Breyer’s dissent.95

Last but not least—and certainly not the least bit surprising—
Leland Yee maintained, even in judicial defeat, that children are
harmed by playing violent video games. As Yee told a reporter for the
New York Times, “the Supreme Court once again put the interests of
corporate America before the interests of our children,” and the video
game industry puts profits ahead of the “well-being of children.”96
With this background on Brown established, the next part of the Article

92 Id. at 2749 (Alito, J., concurring).
93 Supra Part II.B.
94 Supra Part II.C.
95 Supra Part II.D.
examines a very different approach to the causation-of-harm question adopted by Justice Scalia in another recent case that involved supposed injury to minors.

III. IS JUSTICE SCALIA INCONSISTENT WHEN IT COMES TO PROOF OF SPEECH-BASED HARM TO MINORS?

As described in Part II, Justice Scalia in Brown demanded proof of causation of harm to support a compelling interest in protecting minors from violent video games. But just two years earlier in Federal Communications Commission v. Fox Television Stations, Inc., he took a decidedly less rigorous approach when it came to shielding minors from indecent speech in the broadcast medium. Justice Scalia, in delivering the Opinion of the Court, wrote in Fox Television Stations:

There are some propositions for which scant empirical evidence can be marshaled, and the harmful effect of broadcast profanity on children is one of them. One cannot demand a multiyear controlled study, in which some children are intentionally exposed to indecent broadcasts (and insulated from all other indecency), and others are shielded from all indecency.

For Justice Scalia, all that was needed to support the FCC’s position was, in a nutshell, common sense: “Here it suffices to know that children mimic the behavior they observe—or at least the behavior that is presented to them as normal and appropriate. Programming replete with one-word indecent expletives will tend to produce children who use (at least) one-word indecent expletives.” Justice Scalia’s belief here about the lack of need for empirical proof of harm comports well with the Supreme Court’s observation nearly forty years ago in

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98 According to the Federal Communications Commission:
  Material is indecent if, in context, it depicts or describes sexual or excretory organs or activities in terms patently offensive as measured by contemporary community standards for the broadcast medium. In each case, the FCC must determine whether the material describes or depicts sexual or excretory organs or activities and, if so, whether the material is patently offensive.
99 Fox Television Stations, 129 S. Ct. at 1813.
100 Id.
the obscenity\textsuperscript{101} case of Paris Adult Theatre v. Slaton\textsuperscript{102} that “from the beginning of civilized societies, legislators and judges have acted on various unprovable assumptions.”\textsuperscript{105}

Beyond the jarring disconnect on the proof-of-harm-to-minors question between Justice Scalia’s contrasting approaches in Brown and Fox Television Stations, another question arises. In particular, why did not Justice Scalia consider in Brown the difficulty of demanding a multiyear controlled study in which some children are intentionally exposed to violent video games (and insulated from all other forms of violent expression) and others are shielded from all violent expression? After all, Justice Scalia called it an impossible task to conduct a similar study relating to indecent content,\textsuperscript{104} dubbing that chore akin to “obtaining the unobtainable.”\textsuperscript{105} Justice Scalia’s observation in Fox Television Stations on this last point parallels Justice Alito’s observation in Brown that “supporting evidence . . . may not be realistically obtainable given the nature of the phenomenon in question.”\textsuperscript{106}

In the authors’ view, the two key questions raised for the Court by Justice Scalia’s statements in Fox Television Stations, when read in conjunction with the various opinions in Brown, are:

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\textsuperscript{101} Obscene expression is not protected by the First Amendment’s guarantee of free speech. See Roth v. United States, 354 U.S. 476, 485 (1957) (writing that “obscenity is not within the area of constitutionally protected speech or press”); Sable Commc’ns, Inc. v. FCC, 492 U.S. 115, 124 (1989) (writing that “we have repeatedly held that the protection of the First Amendment does not extend to obscene speech”). In 1973, the Supreme Court concluded that the test for obscenity should focus on whether the material at issue: (1) appeals to a prurient interest in sex, when taken as a whole and as judged by contemporary community standards from the perspective of the average person; (2) is patently offensive, as defined by state law; and (3) lacks serious literary, artistic, political or scientific value. Miller v. California, 413 U.S. 15, 24 (1973). In developing this test, the Court held that what is obscene must be measured by local standards rather than nationwide community, observing that “it is neither realistic nor constitutionally sound to read the First Amendment as requiring that the people of Maine or Mississippi accept public depiction of conduct found tolerable in Las Vegas, or New York City.” \textit{Id.} at 32.

\textsuperscript{102} Paris Adult Theatre v. Slaton, 413 U.S. 48 (1973).

\textsuperscript{103} \textit{Id.} at 61 (emphasis added).

\textsuperscript{104} Fox Television Stations, 129 S. Ct. at 1813 (opining that “[o]ne cannot demand a multiyear controlled study, in which some children are intentionally exposed to indecent broadcasts (and insulated from all other indecency), and others are shielded from all indecency”).

\textsuperscript{105} \textit{Id.}

1) On what basis or grounds do the justices determine that empirical proof of causation of harm involving certain types of expression or media messages is simply impossible to obtain?

2) Are the justices capable\textsuperscript{107} of making the determination in Question No. 1 or, akin to Justice’s Breyer’s deferential approach,\textsuperscript{108} should they rely on amici briefs submitted by social scientists and professional organizations to help them in this task?

With regard to the first question, Justice Scalia may have been incorrect in his observations regarding social science data on profanity in Fox Television Stations. Brigham Young University Professor Dale Cressman recently observed that “[r]esearch on profanity is not confined to the field of communication. Sociologists, psychologists, and pediatricians are among those contributing to the academic literature on the nature, social uses, and effects of profanity—both in the media and in everyday life.”\textsuperscript{109} Indeed, more than one century ago, The Psychological Review published an article entitled “The Psychology of Profanity”\textsuperscript{110} that suggested the benefit of swearing as “a safety-valve”\textsuperscript{111} because “if the man did not swear, he would do something worse. It may be likened to the engine blowing off steam.”\textsuperscript{112}

Ultimately, it is unclear why Justice Scalia treated proof of harm caused by violent video games so differently from proof of harm caused by broadcast indecency. One possibility is simply that when it comes to sexual content (rather than violent content), the Supreme Court traditionally has never demanded scientific proof of harm to minors.\textsuperscript{113} Further academic speculation on this point would advance it

\textsuperscript{107} The authors use the word “capable” here in terms of whether the justices are suitably informed of social science methodology to make an informed judgment about its merits and drawbacks.

\textsuperscript{108} See supra Part II.C.


\textsuperscript{110} G.T.W. Patrick, The Psychology of Profanity, 8 PSYCHOL. REV. 113 (1901).

\textsuperscript{111} Id. at 119.

\textsuperscript{112} Id.

\textsuperscript{113} For example, the U.S. Supreme Court more than four decades ago upheld a law denying minors access to “so-called ‘girlie’ magazines” that adults could permissibly purchase. Ginsberg v. New York, 390 U.S. 629, 631 (1968). In doing so, Justice William Brennan wrote for the majority that “[w]e do not demand of legislatures ‘scientifically certain criteria of
very little. Only future cases involving other media artifacts that allegedly cause harm to minors will reveal more about Justice Scalia’s apparent inconsistency between his approaches in Brown and Fox Television Stations.

IV. MEDIA EFFECTS RESEARCH AND THE FIRST AMENDMENT: OVERCOMING THE HIGH BAR OF BROWN

As analyzed earlier, Justice Scalia’s majority opinion in Brown set an extremely high bar for the usefulness of media effects research—a bar that, arguably, very few researchers could ever clear. Of course, the fact that the California law constituted a content-based restriction meant that it triggered strict scrutiny, and thus created a steep uphill battle for researchers whose work supported regulating video games. To the extent that lower tiers of constitutional scrutiny such as the intermediate scrutiny standard might be applied, the magnitude of the media effect in question need not be as severe or as clearly demonstrated.

In fact, the majority specifically noted that legislatures may legitimately make a “predictive judgment” about causal links between media messages and harm to audience members under intermediate scrutiny. This standard would allow for considerably more flexibility in the search for legislative facts sufficient to ground speech regulation, whether that regulation addressed less protected forms of speech such as advertising or involved content-neutral regulations of even legislation.

114 See supra Part III.B (analyzing Justice Scalia’s opinion for the majority).

115 See supra notes 23–24 (addressing the strict scrutiny standard of judicial review).

116 Under the U.S. Supreme Court’s articulation of the intermediate scrutiny standard of judicial review, “a content-neutral regulation will be sustained under the First Amendment if it advances important governmental interests unrelated to the suppression of free speech and does not burden substantially more speech than necessary to further those interests.” Turner Broad. Sys., Inc. v. FCC, 520 U.S. 180, 189 (1997). See generally Jay D. Wexler, Defending the Middle Way: Intermediate Scrutiny as Judicial Minimalism, 66 GEO. WASH. L. REV. 298 (1998) (providing a comprehensive examination of the concept of intermediate scrutiny).


118 The Supreme Court adopted a four-part test for determining whether a restriction on
high-value speech. However, the majority made it clear that the regulation in Brown required strict scrutiny and a clear demonstration of a “direct causal link between violent video games and harm to minors.”

Proof of causation in the media effects arena is notoriously difficult, since many factors and variables may mitigate the degree of the effect or make it difficult to ascertain if the content has any effect at all. Moreover, outside of the laboratory, the mere fact that exposure to media violence and increased aggression exist together does not necessarily prove that the former is the cause of the latter. As media researcher David K. Perry notes, “[a]gression may increase exposure, rather than vice versa. [Moreover], something that affects both exposure and aggression may create the observed covariation. Thus, no causal relationship between the two may exist.” Social researcher Earl Babbie observes that in the social sciences, three requirements must be met to establish a causal relationship:

1) the cause must precede the effect in time (temporal precedence);
2) the two variables must be empirically correlated with one another; and
3) the observed empirical correlation between the two variables cannot be explained away by the influence of some third

commercial speech is permissible under the First Amendment, writing that:

In commercial speech cases, then, a four-part analysis has developed. At the outset, we must determine whether the expression is protected by the First Amendment. For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and whether it is not more extensive than is necessary to serve that interest.


119 Brown, 131 S. Ct. at 2738.
122 Id. at 26.
variable that causes both of them.\textsuperscript{123}

While the first two requirements may not present too much difficulty for social science researchers, it is the third requirement of controlling for other variables that makes establishing a causal relationship more challenging.\textsuperscript{124} In media effects research, it is quite difficult to control for all possible mitigating or extraneous factors.\textsuperscript{125} For example, in the study of violent content and its possible effect on anti-social behavior, the research cannot statistically control for prior exposure to violent content either in real-life or in mediated contexts, and it is tough to statistically control for factors such as an individual’s disposition toward aggressive or violent behavior.\textsuperscript{126}

Even with rigorous scientific experiments, causation is a tricky epistemological problem. As Perry puts it, “[i]n an absolute sense, science never proves one thing causes another. Instead, one must look at the preponderance of the evidence.”\textsuperscript{127} Yet something akin to a preponderance-of-the-evidence standard is apparently what the Brown majority rejects when it asserts that “California’s burden is much higher, and because it bears the risk of uncertainty, ambiguous proof will not suffice.”\textsuperscript{128} In a strict sense, a potential regulator bearing the risk of uncertainty could seemingly never overcome that burden with the sort of causal evidence social science is capable of producing due to the nature of the enterprise.

Controlled experiments can go a long way toward demonstrating causation, but they also carry with them limitations that are frequently less than satisfying in a legal context. For one thing, it may be impossible to establish that violent video games cause aggression or

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\textsuperscript{123} EARL R. BABBIE, THE PRACTICE OF SOCIAL RESEARCH 70 (7th ed. 1995).
\textsuperscript{125} See W. JAMES POTTER, ON MEDIA VIOLENCE 178-79 (1999).
\textsuperscript{126} See, e.g., Clay Calvert & Robert D. Richards, The 2003 Legislative Assault on Violent Video Games: Judicial Realities and Regulatory Rhetoric, 11 VILL. SPORTS & ENT. L.J. 203, 267 (2004) (quoting Margaret Talbot, My Son, the Cyborg, N.Y. TIMES MAG., June 15, 2003, at 11) (writing that “[i]n research that does find an association between aggression and consumption of certain kinds of media, it can be hard or impossible to sort out the effects of television watching or video-game playing from other factor—living in dangerous neighborhoods or with neglectful families, for example”).
\textsuperscript{127} PERRY, supra note 121, at 26.
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violence without expensive longitudinal studies. As communication researchers Roger D. Wimmer and Joseph R. Dominick assert: “It is well known that persuasion and attitude change rarely take place after only one exposure; they require multiple exposures over time.”129 Thus, a longitudinal study known as a “panel study,” in which the same group of participants is studied and receives multiple exposures of media material over a period of time, may be the most likely way to determine if a causal relationship exists. Wimmer and Dominick note that panel studies “produce data suitable for sophisticated statistical analysis and enable researchers to predict cause-and-effect relationships.”130

Such panel studies are almost completely unavailable to demonstrate the effects of violent video games,131 in part because the sophisticated graphics in video games are a relatively recent phenomenon.132 As one study of the literature points out, video game research is still in its infancy in comparison to research on television and film violence, which have “longitudinal studies in which children have been followed for periods of up to 17 years, with investigators controlling for numerous confounding variables, including parenting style, socioeconomic status and psychiatric disorders.”133 Moreover, panel studies over extended time periods are not only expensive to conduct, but can suffer from high attrition rates of participants as a study progresses.134 Despite the logistical challenges raised by attempting to conduct a panel study, the foundation of such study—the experiment—is what social science researchers need in order to

130 Id. at 201.

See Brief of Social Scientists, Medical Scientists, and Media Effects Scholars as Amici Curiae in Support of Respondents, Brown v. Entmn’t Merch. Ass’n, 2010 U.S. S. Ct. Briefs LEXIS 1805, **32-34 (2010) [hereinafter Amicus Brief] (finding few longitudinal studies in this area, and even those few noted consisted of measures at only two points over short periods rather than multiple points over years); John L. Sherry, The Effects of Violent Video Games on Aggression: A Meta-Analysis, 27 HUMAN COMM. RES. 409, 426 (2001) (writing that “conspicuously absent from the video game research are other designs used in the study of television violence such as longitudinal designs and field experiments”).
133 Id.
134 WIMMER & DOMINICK, supra note 129, at 201.
establish any degree of causality. As mass communication researcher Samuel D. Bradley notes: “We can conclude that experimental methodology provides researchers the opportunity to have great control over confounding variables and to make strong statements about the nature of causation.” Without oversimplifying the nature of experimental design in the hard sciences, study designs in those fields are often simpler and more straightforward. Researchers in the natural sciences do not need to worry as much about covariates—variables that are a possible predictor of the dependent variable. In the social sciences, and especially in media effects research, it is difficult to measure some of the possible covariates at play because of the social nature of the variables under investigation.

As the Brown majority pointed out, many of the studies relied on by California “show at best some correlation between exposure to violent entertainment and minuscule real-world effects, such as children’s feeling more aggressive or making louder noises in the few minutes after playing a violent game than after playing a nonviolent game.” The problem of inadequate proxies or surrogate measures for actual aggression has consistently bedeviled much research on violent video games. As one amicus brief filed in Brown by social scientists and others contended: “Like Anderson’s, these experiments rely on proxies for real aggressive or violent behavior, such as the participant’s willingness to administer blasts of white noise against an

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136 For instance, Alexander Rosenberg writes that:

Social science is just much harder than natural science: The research object is we human beings, and we are fiercely complicated systems. It is therefore no surprise that less progress might be made in these disciplines than in ones that deal with such simple objects as quarks, chemical bonds, and chromosomes. After all, the human being is subject to all the regularities of the natural sciences, as well as to those of psychology, sociology, economics, et cetera. Teasing out the separate effects of all the forces determining our behavior is a more formidable task than that which faces any other discipline.

ALEXANDER ROSENBERG, PHILOSOPHY OF SOCIAL SCIENCE 10 (1988).


138 See Christopher J. Ferguson, Blazing Angels or Resident Evil? Can Violent Video Games Be a Force For Good?, 14 REV. GEN. PSYCH. 68, 74 (2010) (describing “third variable” effect as the “concern that other variables such as gender, family violence, genetics, and so forth, may account for any small relationship between violent video game exposure and aggression”).

unseen (and non-existent) opponent." However, many social scientists would argue that any kind of anti-social effect may be a significant indicator despite the perceived miniscule nature of the effect. The problem, at least for lay observers such as justices and judges, is that the proxies seemingly bear no apparent relationship to whether someone would act aggressively or violently in the real world. Even in experiments in which actual aggressive behavior is measured after exposure to violent video games, the mere presence of an experimenter granting implicit or explicit approval to the aggressive acts may suggest that participants are conforming to contextual expectations rather than carrying out aggression that would occur in a more naturalistic setting. As one critique of such experiments contends, "many aggression experiments could be regarded as variations of the Milgram experiments on authority." Despite these problems, social scientists have found that exposure to real-life violence is a significant predictor of adolescents’ aggressive thoughts, feelings, and behavior. However, a combination of exposure to real-world and mediated violence is more difficult to measure. Children are sometimes unreliable on self-report measures, which can convolute study design when considering empirically valid experiments designed to demonstrate a causal relationship between mediated violence and aggressive behavior.

Justice Scalia’s opinion seemed particularly concerned with affective or attitudinal proxies that may or may not predict real-world aggression. There is even a deeper problem with such measures in

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140 Amicus Brief, supra note 131, at **20.
143 Id. at 415. See also STANLEY MILGRAM, OBEDIENCE TO AUTHORITY: AN EXPERIMENTAL VIEW 2-4 (1974) (describing experiments in which human subjects administered what they thought were electric shocks to individuals, demonstrating the capacity of individuals to obey authority figures despite consequences).
144 See Amicus Brief, supra note 131, at **17 (noting that “there are many factors that may influence youth violence or aggressive behavior, including: family violence, antisocial personality traits, and association with delinquent peers”).
146 As one meta-analysis of the violent video game literature observed, “[i]t comes as no
the realm of the First Amendment, although this point was not articulated by the Court. To the extent that violent video games affect empathy toward others, attitudes toward violence, or other processes of thought, such effects are arguably not subject to government regulation under standard First Amendment doctrine. As Judge Frank Easterbrook pointed out in connection with the regulation of pornography in American Booksellers Association, Inc. v. Hudnut, to the extent that speech affects attitudes or thought processes, such speech, even if pernicious, is subject to core First Amendment protection:

Racial bigotry, anti-semitism, violence on television, reporters’ biases—these and many more influence the culture and shape our socialization... Yet all is protected as speech, however insidious. Any other answer leaves the government in control of all of the institutions of culture, the great censor and director of which thought are good for us.

This recognition highlights the tension between classic First Amendment theory, based in assumptions of human rationality and agency, and much social scientific thought, which often has a more skeptical and deterministic view of human autonomy.

The Brown majority’s standard also creates difficulties in terms of the magnitude of the effect detected by the researcher. Justice Scalia expressed concern both as to the “effect size” in the studies proffered by California and whether those effects were greater than those shown in research into the effects of violence in other media such as television. Effect size is “the degree to which one variable can predict surprise that individuals just exposed to a violent video game in a laboratory should be thinking aggressive thoughts. The important question is whether these ‘thoughts’ then transfer to aggressive behaviors.”


Am. Booksellers Ass’n v. Hudnut, 771 F.2d 323 (7th Cir. 1985).

Id. at 330.

Kent Greenawalt, Free Speech Justifications, 89 COLUM. L. REV. 119, 150 (1989) (noting that the autonomy theory of free speech makes the claim “that the government should always treat people as if they were rational and autonomous by allowing them all the information and advocacy that might be helpful to a rational, autonomous person making a choice”).

See, e.g., Bunker & Perry, supra note 18, at 4 (asserting, in relevant part, that “[t]he deterministic assumptions of most social scientists are anathema to theorists of the ‘liberal self,’ who envision the human person in Kantian terms as an autonomous agent at least partially transcending the causal, material world of nature”).
the other improving upon chance alone.”151 In one of Dr. Anderson’s meta-analyses relied on by the state of California, he and his co-authors placed the effect size at .152 or 2.31 percent.152 As the social scientists’ amicus brief argued, this is a small effect size, suggesting that “playing violent video games is only 2.31 percent better than chance alone at predicting whether that individual will engage in aggressive behavior.”153 The amicus brief also contends that this estimate actually may be on the high side because Dr. Anderson’s study did not control properly for other possible causes of aggressive behavior.154 Given the nature of social science research, particularly in mass communication, a large effect size is seemingly impossible to achieve because of the social factors that play an important part in the media effects puzzle.155 Mass communication scholars studying media effects have and will continue to struggle with unexplained variance and small effects sizes.156

Although “effect size” as a statistical concept plays an important role in judging the robustness of social scientific findings, the Brown majority’s reference to “miniscule real-world effects”157 may actually suggest another important constitutional consideration, the severity of the purported effect in practical terms. In other words, strong free speech protection simply assumes a certain amount of collateral damage, as it were, from harmful speech that must be tolerated in order to obtain the benefits of an open society.158 Only when that damage is extreme is regulation warranted. As one study put it, “[i]f television and television violence contribute to only one homicide every ten years, many might suggest leaving it alone. On the other hand, if it

151 Amicus Brief, supra note 131, at **27.
153 Amicus Brief, supra note 131, at ** 27–28.
154 Id. at **28.
155 See, e.g., PERSE, supra note 141, at 12 (asserting that “[t]he main reason that media’s impact is not more substantial is that other aspects of life have stronger influence on people”).
158 MATTHEW D. BUNKER, CRITIQUING FREE SPEECH: FIRST AMENDMENT THEORY AND THE CHALLENGE OF INTERDISCIPLINARITY 6 (2001) (noting that “[m]arketplace theorists have generally assumed, with little empirical evidence, that the benefits of an unregulated marketplace of ideas far outweigh [negative] side effects”).
caused a doubling of homicide rates, then regulation would seem to represent a clear possibility.”

Although Justice Scalia’s majority opinion does not provide any precise account of the severity of the effects necessary to satisfy strict scrutiny, it does make clear that those demonstrated by Dr. Anderson are seriously insufficient. Indeed, it is difficult to see how any social scientific finding could meet the requirements of strict scrutiny under this standard. It is likely that the role of mediated violence in homicide rates, for example, is such that no empirical method can precisely identify all of the causal factors.

Although media messages may play a role in negative effects, even behavioral ones, it may be factors such as individual disposition and characteristics that determine the degree of the effect, if any. As Bryant and Thompson write, “[a]nother challenge for media effects researchers will be to identify the circumstances, conditions, or variables that account for media effects at all their various levels and forms and offer generalizations—perhaps very complex ones, even typologies of effects—that will explain the complex phenomenon of mass media effects.” However, empirical evidence accumulated over four decades of study suggests consistent findings regarding the causal relationships between exposure to mediated violence (television and video games) and negative effects, specifically imitative behavior, fear and desensitization. Whether these findings will ever be sufficient to justify regulation under the strict scrutiny test is unclear.

Aside from the issue of real-world effects, the Brown majority required that, as a constitutional matter, California needed to prove that the effects of violent video games are greater than those of violent depictions that are constitutionally protected in other media such as television. As Justice Scalia observed, Dr. Anderson “admits that the

159 Bunker & Perry, supra note 18, at 19.
160 Interestingly, during the period in which violent video games have risen in popularity, juvenile crime rates have plummeted. Lawrence Kutner & Cheryl K. Olson, Grand Theft Childhood: The Surprising Truth About Violent Video Games and What Parents Can Do 60 (2008).
161 See Kimberly L. Bissell & Pieqin Zhou, Must-See TV or ESPN: Entertainment and Sports Media Exposure and Body-Image Distortion in College Women, 54 J. COMM. 5, 17 (2004) (discussing how advertisements are less likely to affect body image if the model in the advertisement is of a different race than the viewer).
162 Bryant & Thompson, supra note 156, at 56.
163 Id. at 177; George Comstock with Haejung Paik, Television and the American Child 152 (1991).
same effects have been found when children watch cartoons starring Bugs Bunny or the Road Runner, or when they play video games like Sonic the Hedgehog that are rated “E (appropriate for all ages), or even when they ‘vie[w] a picture of a gun.’”\textsuperscript{164} The \textit{Brown} majority did not specify how much greater the effects would have to be to justify regulation, but this requirement creates an additional—and difficult—constitutional barrier to social science evidence under the strict scrutiny standard.

The foregoing suggests media effects research may never be able to meet the rigorous standard forged by Justice Scalia, due to both the complex nature of the enterprise and the vast array of influences on individuals’ attitudes and behavior beyond just beyond media content. Justice Scalia’s reductive picture of how media effects must operate in order to justify regulation under strict scrutiny bears little resemblance to how media effects scholars understand the phenomena in question.

Under Justice Breyer’s deferential approach,\textsuperscript{165} however, social scientific work in this area could indeed be influential, as it was for Justice Breyer himself in \textit{Brown}. Even while acknowledging the schism within the social scientific community itself, Justice Breyer was able to find sufficient expert opinion supporting the case for regulation. Nevertheless, because deference to experts has not typically been a feature of strict scrutiny analysis,\textsuperscript{166} garnering five votes on the High Court for the deferential approach may be a difficult proposition.

V. CONCLUSION

In a relatively recent article published in the \textit{American Behavioral Scientist}, Professor Barrie Gunter observed that “[s]ocial scientific research into the effects of media violence has fueled much debate about the need for tighter controls over the mass media.”\textsuperscript{167} Indeed, it will be recalled that Leland Yee’s cry for tighter controls in California on the sale of video games to minors was premised on his belief in

\footnotesize{\textsuperscript{164} Brown v. Entm’t Merch. Ass’n, 131 S. Ct. 2729, 2739 (2011) (citations omitted).\
\textsuperscript{165} See supra Part II.C (analyzing Justice Breyer’s opinion in \textit{Brown}).\
\textsuperscript{166} See \textit{Grutter v. Bollinger}, 539 U.S. 306, 374 (2003) (Kennedy, J., dissenting) (writing that “[d]eference is antithetical to strict scrutiny, not consistent with it”).\
\textsuperscript{167} Barrie Gunter, \textit{Media Violence: Is There a Case for Causality?}, 51 AM. BEHAV. SCIENTIST 1061, 1110 (2008).}
social science research.¹⁶⁸

But after Brown, what is left for media effects research and researchers, not just on the question of causation of harm allegedly caused by violent media content, but also on issues related to other supposedly negative consequences of entertainment media content such as indecent expression on the television? Should research agendas shift? Should research methodologies change? To put it bluntly, where do communication scientists who address questions of media harm and who hope to influence law and legislation with their findings move forward from Brown in pursuing work that actually carries legal relevance?

Answering these questions is daunting, due largely to a pair of critical disconnects:

• The disconnect, described in Part III, between Justice Scalia’s demanding proof-of-causation approach in Brown and his seemingly carefree, worry-not-about-empirical-proof approach in Fox Television Stations; and

• The social-science deference disconnect in Brown between the no-deference tack of Justice Scalia and the substantial-deference approach of Justice Breyer.

The first disconnect actually provides social scientists and communication researchers with a propitious educational opportunity at two different levels. In particular, they should take up the task of educating both legislators and jurists about precisely whether and when social science research can begin to adequately answer questions about the harm allegedly wrought by any given type or mode of media content.

For example, legislators like those in California who approved the ill-fated law in Brown would be wise in the future to better understand both the shortcomings and the strengths of the extant research on which they rely to buttress their bills and pad their statements of legislative findings. A dose of “social science reality” during the drafting process—when a bill is still being debated—could influence not only the final shape of the legislation, but, even more dramatically, whether it should go forward to a vote at all or rather be tabled.

To the extent that the legislative failure to understand the weaknesses of Dr. Anderson’s research, and how it might be attacked

¹⁶⁸ Supra notes 28–34 and accompanying text.
in court by the likes of Justice Scalia, resulted in the demise of California’s violent video game law—it proved to be a very costly mistake. In October 2011, the U.S. Supreme Court referred a request for attorneys’ fees filed by the Entertainment Merchants Association (EMA) in Brown back to the Ninth Circuit.\textsuperscript{169} The financially strapped State of California then agreed in late January 2012 to reimburse the EMA for its costs and attorneys fees to the tune of a whopping $950,000.\textsuperscript{170} Although it certainly is not beyond legislators to ignore the wisdom of neutral social scientists and instead substitute feel-good, but ultimately doomed, laws that score political points,\textsuperscript{171} social scientists can attempt to enlighten legislators about the legislative facts\textsuperscript{172} their work can provide.

When it comes to educating justices and judges, through in-court testimony or the filing of friend-of-the-court briefs, social scientists have an ethical obligation\textsuperscript{171} to explain precisely whether, when, and what types of research can address, in however small or large of a way, the questions of alleged media-caused harm in the case at bar. In other words, rather than taking sides by filing a brief on behalf of one party or the other, social scientists can file a brief in support of neither party that simply articulates the realities and limitations of media effects research on any given issue. Such neutrality would seem to be fairly


\textsuperscript{171} As two legal commentators observed in 2005:

\begin{quote}
Just as kids surely will continue to play video games in the near future, politicians surely will continue to play political games with this incredibly popular form of new media that they neither play nor understand. What the politicians do appear to understand, however, is the political hay and headlines that can be made by promoting legislative initiatives targeting video game content. To the old aphorism, then, that the only things one can count on in life as inevitable are death and taxes, the authors propose the addition of video game legislation.
\end{quote}


\textsuperscript{172} See supra notes 9–12 (defining legislative facts).

\textsuperscript{171} To the extent that their research can be abused and misused by legislative bodies to stifle First Amendment speech interests and, to the extent that it can be misunderstood by jurists, social scientists assume, in the opinion of the authors of this article, such an obligation.
easy for social scientists, who ostensibly are objective in their methodologies. Before the justices either demand proof of causation with certitude (as with the Brown majority) or determine that social science research simply is neither feasible nor necessary (as in Fox Television Stations), social scientists in the field of media effects can explain what is and is not possible. Was, for instance, Justice Scalia really correct that empirical research on the effects on minors of hearing fleeting expletives is simply impossible to come by? Are there some cases that really should be left to what former Justice David Souter once called “untutored intuition” rather than empirical social science data?

Other areas of the law are instructive here. For instance, in the First Amendment context of state-imposed caps on contributions to candidates for political office, the U.S. Supreme Court observed in Nixon v. Shrink Missouri Government PAC that “[t]he quantum of empirical evidence needed to satisfy heightened judicial scrutiny of legislative judgments will vary up or down with the novelty and plausibility of the justification raised.” Viewed in this light, the quantum of empirical social science evidence needed to support a law restricting allegedly harm-producing speech also should be allowed to vary up or down on what might be considered a sliding scale. Such variance here, however, should be permitted not because of “the novelty and plausibility of the justification,” but instead because of the methodological difficulties and obstacles that social scientists encounter in gathering empirical evidence.

For instance, the more difficult it is to create experiments or to design other methodologies for obtaining causal evidence of harm attributed to a specific variety of media content, the quantum of empirical evidence of causation demanded by the judiciary should be reduced while, perhaps, the quantum of evidence demonstrating a correlation should be ratcheted up to account for the causation problems. It is up to social scientists to educate the judiciary about these methodological difficulties so that the justices can better determine the proper quantum of empirical evidence—be it causational, correlational or otherwise—that must be demonstrated by a govern-

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174 See supra note 99 and accompanying text.

175 City of Erie v. Pap’s A.M., 529 U.S. 277, 311 n.1 (2000) (Souter, J., concurring in part and dissenting in part) (addressing “the issue of evidentiary justification” and stating that “[a] lesser showing may suffice when the means-end fit is evident to the untutored intuition”).


177 Id.
The second disconnect—the one between Justices Scalia and Breyer on the amount of judicial deference that should be accorded to social scientists and the legislative bodies that adopt their findings—actually suggests that communication scientists need not panic and radically alter their research agendas or methodologies after Brown. What they must do, instead, is to take into account Justice Scalia’s observation that some research is so far removed from real-world settings—his attack on the fill-in-the-blank word game noted earlier being a prime example—that it erodes the possibility of giving any deference to the findings of the social scientists who produce it.

Perhaps developing longitudinal studies that track a cohort of individuals across time in real-world settings will leave jurists with a greater appreciation of—and sense of deference for—the work of social scientists. Moreover, experimental studies designed with a pre-test can provide a baseline measure of the outcome variable, presumably an aggressive or violent behavior. Such a pre-test would allow researchers to measure additional variables, thus letting them account for individual factors such as disposition or family environment that might also influence anti-social outcomes. An ideal design for such an experiment, in the authors’ opinion, might include a panel study extending through the critical years of childhood and adolescence to try to track the influence of violent video games. Even this methodology comes with the caveat that it may never be possible to completely parcel out the effects of mediated violence from factors such as real violence or peer influence in children’s lives.

To the extent that judicial deference is not mandated by another authority, it is discretionary. In such discretionary situations, when

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178 See supra note 59 and accompanying text.
179 Thomas W. Merrill, Judicial Deference to Executive Precedent, 101 Yale L.J. 969, 971 (1992) (describing the “principle of mandatory deference” in which “courts are compelled to defer to agency interpretations because Congress has directed them to defer”). Deference may be afforded by courts to both administrative agencies and, in the case of the law at issue in Brown and that is central to the focus of this article, to legislative bodies in cases involving First Amendment rights. See United States v. Mead Corp., 533 U.S. 218, 228 (2001) (observing that “the fair measure of deference to an agency administering its own statute has been understood to vary with circumstances, and courts have looked to the degree of the agency’s care, its consistency, formality, and relative expertness, and to the persuasiveness of the agency’s position”); Turner Broad. Sys., Inc. v. FCC, 520 U.S. 180, 196 (1997) (writing that “[w]e owe Congress’ findings an additional measure of deference out of respect for its
deference should be given, to whom deference should be given, and how much deference should be given thus become important issues. Deference in some areas of the law can range on a continuum “from great respect at one end . . . to near indifference at the other.”\textsuperscript{181} Cases thus often initially revolve around deciding what is “the appropriate level of deference.”\textsuperscript{182}

The bottom line is that it is time for social scientists (in particular, communication and media effects researchers) to earn the type of deference—the type of respect and esteem—that they received in \textit{Brown} from Justice Breyer. They can begin to do that by providing the type of neutral and detached educational functions described immediately above and by foregoing research that lacks real-world generalizability to the legal issues confronting the court. Courts already grant substantial deference to college-level educators in other contexts,\textsuperscript{183} so social scientists like Dr. Anderson who themselves serve as educators at institutions of higher education certainly have a fighting chance of earning similar deference. If social scientists thus view \textit{Brown} as a wake-up call, rather than as a professional attack or an irreparable rebuke, then communication research will remain relevant before legislative bodies and the judiciary for years to come.

\textsuperscript{181} See Merrill, supra note 179, at 971 (explaining that in this model, courts defer in the name of “sound judicial decisionmaking”).
\textsuperscript{182} See, e.g., Lopez v. Terrell, 654 F.3d 176, 180 (2d Cir. 2011) (noting that “[w]e determine first the appropriate level of deference to afford the agency’s interpretation”); Jock v. Sterling Jewelers, Inc., 646 F.3d 113, 124 (2d Cir. 2011) (writing that “[i]t is worth reemphasizing that the primary thrust of our decision is whether the district court applied the appropriate level of deference when reviewing the arbitration award”)
\textsuperscript{183} See, e.g., Grutter v. Bollinger, 539 U.S. 306, 328 (2003) (deferring to university officials’ judgment in an equal protection case on the issue of whether the interest in student-body diversity was compelling).