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VIEWPOINTS AND FLASHPOINTS IN THE STUDY OF VIDEO GAME VIOLENCE AND AGGRESSION

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Abstract

Researchers from different backgrounds have approached the topic of violent video games and aggression with varying assumptions, methods, and goals. Researchers from an experimental psychology orientation seek to test theories under controlled conditions, and assume that all children are at risk of harm from acting out violence during gameplay. They champion policies to reduce youth exposure to violent game content. Researchers from applied fields such as public health, clinical psychology and criminology assume that video game effects (negative or positive) will vary by child, circumstance and content, and seek to identify high-risk patterns via studies in real-world settings. These different lenses illuminate ongoing disagreements about the relationship, if any, between violent video games and harmful aggressive behaviors. Some disagreements could be mitigated through greater clarity in definitions and methods. For example, confusion arises when researchers fail to clearly define "aggression"; treat aggressive thoughts, feelings, and behaviors as part of a continuum; or view aggression as equivalent to harmful intent or violence. Studies suggest that media violence researchers, like all humans, tend to disproportionately seek out and value evidence that supports their point of view. Actively searching for common ground, and welcoming new researchers from a variety of disciplines, may help move the field forward.

Keywords: video games, media violence, aggression, computer games, research bias.

Introduction

In 2008, James A. Anderson published an analysis of trends in media effects research, based on an archive of 966 articles dating back to the late 1920s. Concerns about the effects of violent content in all media, first on aggression and later on violence, show remarkable persistence, shifting focus through the decades from films to comic books, and regaining energy with the transition to television and video games. Despite the unremarkable findings of these studies (e.g., small correlations between exposure to violent media and aggressive cognitions), media violence research has continued to attract attention and funding support.

The archive shows that, unusually, just ten researchers — including Craig Anderson, L. Rowell Huesmann, Joanne Cantor and Victor Strasburger — authored nearly 10% of the archive's articles. The majority of these authors focused on harmful effects of media violence. Also, based on James Anderson's review of their websites, the small core of researchers who made media violence a major focus of their careers were politically active in promoting their viewpoint.

This article will describe and contrast some of the varied assumptions, methods, and goals with which researchers from different backgrounds have approached the topic of violent video games and aggression. One example is the experimental psychology orientation of researchers such as Craig Anderson, Brad Bushman, and colleagues. From this perspective, laboratory experiments are the preferred form of research, because when testing theory-based causal hypotheses, variables deemed most important can be controlled and manipulated, ruling out plausible alternative explanations for findings (Anderson & Bushman, 1997). Violent content is assumed to affect children via "the learning, activation and application of aggression-related knowledge structures stored in memory, (e.g., scripts, schemas)"; Anderson and Bushman (2001, p. 355) have dubbed this theory the "General Aggression Model" (GAM). Children are implicitly viewed as passive receptacles for information.

Other relevant features of this perspective include the following. Exposure to violent media images, and especially acting out violence via the interactive medium of electronic games, is assumed to have the potential to increase aggression in all children. Aggressive thoughts, feelings and behaviors are in many ways equivalent, and are all linked to potential physical harm to others. Researchers should view public policy advocacy as part of their job, with the goal of teaching the general public about the dangers of media violence, and reducing children's exposure to media violence through whatever means possible (Bushman & Anderson, 2001). Population statistics on violent behavior are of little relevance to their work (Anderson & Gentile, 2008).

Another approach is exemplified by researchers such as Cheryl Olson, Lawrence Kutner, Eugene V. Beresin, and Chris Ferguson, with backgrounds in applied fields such as public health, clinical psychology, child psychiatry, and criminology. Many of their assumptions are quite different. For example, they consider the effects of

media violence as likely to vary widely depending on many variables, such as the nature of the content, social and physical environment, and children's own perceptions, motivations and goals. Some effects might be positive and compatible with healthy youth development. They tend to favor field-based research on subjects who are representative of the populations of interest (e.g., children and adolescents exposed to violent video games). Their work is informed by population data on public health and crime (Olson et al., 2009). Their goal is to provide practical guidance for the public, including parents, health professionals, policymakers, and even video game players.

Approaches to studying video game violence

In the United States, during the late 1980s and early 1990s, concerns about video game violence were fueled by fear of juvenile crime, and by a small number of widely publicized mass shootings at schools (Kutner & Olson, 2008). This view was reflected in a series of academic papers (e.g., Cantor, 2000; Anderson & Bushman, 2001; Anderson, 2004) which, in their opening paragraphs, explicitly connect one or more of these school shootings to violent video games. For example, Anderson (2004) begins with "For many in the general public, the problem of video game violence first emerged with school shootings by avid players of such games," and goes on to list 15 incidents in several countries that have been "linked" to violent games.

Another example of the thinking of that era is a 1999 book coauthored by Lt. Col. Dave Grossman (Ret.), a former psychology instructor at the West Point military academy, called *Stop Teaching Our Kids to Kill: A Call to Action Against TV, Movie and Video Game Violence*. (Grossman's own research and expertise encompassed the psychology of killing in war.) The book begins by describing a school shooting in Paducah, Kentucky, making the claim (now disproved) that the adolescent boy learned to shoot a gun solely through practice with video games, and stating, "Let's face it: We live in a violent world" (p. 9). Video games are described as training simulators for killing. The authors go on to detail statistics showing rising crime rates in the U.S. and worldwide, briefly mentioning a recent downturn in crime but discounting its importance compared to multi-year trends. (We'll return to that point later.)

From the late 1990s to early 2000s, perhaps the most-publicized research on violent video games and aggression was carried out by a small group of experimental psychologists, especially Craig Anderson and colleagues. A typical experiment had college students play a non-violent or violent videogame for 15 minutes, then stop to take a competitive reaction time test. Anderson used a modified version of the Taylor Competitive Reaction Time Test, involving a punishment often referred to as a "noise blast" (a burst of static or "white noise," not notably aversive or painful) which could vary in loudness or duration. (The original test used electric shocks.) Based on these studies, violent video games were deemed uniquely dangerous, "greater than the dangers of violent television or violent movies" (Anderson & Dill, 2001, p. 788). This, they stated, was

due to three factors: the player's identification with the aggressor created by the "first-person" perspective common to many violent games; the choice to actively participate in the game's violent acts; and the "addictive nature" of video games, whose slot-machine-like reward structure would "enhance the learning and performance of aggressive scripts." Video games would increase real-life aggression in the short term by priming aggressive thoughts; longer-term, they would make aggression-related scripts quickly accessible in real-life conflict situations.

To supplement experimental findings, Anderson and colleagues also undertook some survey research with children. In Anderson et al. (2008), several non-standardized, subjective measures of exposure to violent content were used for each of three samples in the U.S. and Japan. For example, one method involved asking children to list three favorite games and indicate how much violence they felt those games had; this "violent content rating" was then multiplied by the recalled frequency of play for each listed game, and the three scores were averaged. Another study asked subjects about favorite game genres, and assigned points based on presumed violent content in that genre.

As James Anderson (2008) pointed out, most researchers on media violence had assumed that not all children were at risk of harm from media; rather, some children under some conditions exposed to some types of content might experience some harm. Other children, under the same conditions, might be just fine, or even benefit. Craig Anderson and his frequent collaborator Brad Bushman, by contrast, promulgated the idea that all children could be badly influenced by violent video games (and presumably, any type of violent content, since they do not provide a definition or criteria). Based on this assumption, they argued that tiny but statistically significant effects on aggression found in laboratory studies were cause for alarm: "When effects accumulate across time, or when large portions of the population are exposed to the risk factor, or when consequences are severe, statistically small effects become much more important... All three of these conditions apply to violent video game effects" (Anderson et al., 2010, p. 170).

From testing theory to describing reality

Olson and Kutner, among others, sought to bring research on video game violence out of the lab and into the real world. Rather than developing theories of causation and designing studies to test or support those theories, they saw a need to describe current reality. "A firmer foundation is needed to help clinicians, policymakers and parents identify combinations of game content, children's characteristics, and game play environments that may promote aggressive behavior...." (Olson et al., 2007, p. 78). Information on how often children were playing, with whom, for how long, in what settings, and for what reasons would help distinguish normal, healthy play patterns from atypical ones that might serve as markers of increased risk.

The team collected a wide range of survey data from a representative sample of youth from two U.S. states, incorporating validated measures of

behavior, personality traits and life experiences from other sources to maximize replicability. To better interpret the findings, they also collected qualitative data via focus groups. This confirmed their impression that for most adolescents, video gaming was part of everyday life, but game violence was not; the "unreality" of violent video games was part of their appeal (Olson, Kutner & Warner, 2008).

Looking at nationally representative studies on youth risk behaviors and crime, Olson's team concluded that a focus on rare events such as school shootings was far less relevant or productive than exploring possible effects of violent games on common but serious aggressive behaviors such as bullying or fighting. To create a repeatable if rough measure of exposure to violent content, children were asked to list up to five games they had "played a lot in the last six months," and Entertainment Software Rating Board ratings were determined for each game listed. Initial analyses found evidence to support a dose-dependent effect of violent games — defined as games with a Mature (for age 17+) rating — on bullying and physical fights, but not delinquent behaviors such as stealing or truancy (Olson et al., 2009). The survey showed that a majority of boys and minority of girls regularly played M-rated video games; thus, the link to aggressive behavior was stronger for girls.

Further analyses of the survey dataset, done in partnership with Chris Ferguson, statistically controlled for likely mediating variables such as parental involvement, aggressive personality, and amount of life stress. In these analyses, aggression and stress level predicted bullying and physical aggression, and violent video game play did not (Ferguson, Olson, Kutner, & Warner, 2014).

Ferguson went on to address other gaps in the literature, in ways that often contradicted the work of Anderson and colleagues. For example, his experimental studies of the effects of social video game play found that cooperative video game play was associated with reduced aggressive behavior, regardless of violent content (Jerabeck & Ferguson, 2013). Some of his other studies are described below.

Other researchers have begun to question the simplistic link between violent video games and aggression. Adachi and Willoughby recently published a series of articles describing both experimental studies and a four-year longitudinal study that explore relationships between video game violence, competitiveness, and aggression. They note that violent games are typically more competitive than non-violent games, and that previous experimental studies not only failed to equate the games used for competitiveness, but also used measures that conflate competition and aggression, most commonly the modified Taylor Competitive Reaction Time Test (which is described to experimental subjects as a competition with another person) (Adachi & Willoughby, 2011). In a series of three experiments that isolated the effects of competition and violent content, they found that violent content alone did not increase short-term aggressive behavior (as measured by the "hot sauce paradigm": the amount of strong hot sauce the subject decides to add to someone else's food). Further, they found that competitive

gameplay increased aggressive behavior, even when a very violent, only moderately competitive game was compared to a very competitive, low-violence game.

In a four-year longitudinal study of Canadian adolescents in grades 9 to 12, the researchers found that violent video game play predicted higher levels of aggression over time, even controlling for non-violent game play and overall frequency of video game play. The effect was small, linking ongoing violent game use to a less-than-one-percent increase in later aggressive behavior (Willoughby, Adachi, & Good, 2011). However, based on additional assessments of this cohort that compared socialization (competitive play predicts later aggression) and selection (aggression predicts greater competitive play) hypotheses, and informed by their experimental findings, the authors' thinking became more nuanced; they found that although competitive video game play predicted higher levels of later aggression (controlling for previous aggression level), aggressive teens were also more likely to self-select competitive play (Adachi & Willoughby, 2013).

Issues and clashes in the study of video game violence and aggression

There is a long tradition in the United States of blaming the behavior and corruption of youth on violent mass media, from the lurid "half-dime" novels of the late 19th century to Hollywood gangster films of the 1930s and horror/crime comic books of the 1950s. Violent video games are merely the most recent medium to be decried by researchers, politicians, healthcare providers and the popular press. The appeal of such a link is intuitive: like breeds like.

As parents, we want to protect our children. As teachers, we want them to learn and practice ethical behaviors. As clinicians, we want them to be healthy in body and in mind. So actions to seek out and defend against what may appear to be root causes of dangerous, unwanted or unhealthy behaviors are natural and expected.

But it is an extraordinary claim that exposure — almost always voluntary exposure — to a communications medium will by itself dramatically change behavior in other spheres of children's lives. Such extraordinary claims require extraordinary evidence. But that evidence has been lacking, leaving a gap often filled by emotionally compelling and vivid anecdotes, data from studies with mutable terminology and methods, and results interpreted in procrustean ways to fit a hypothesis.

What is aggression?

Studies on video game violence and aggression are frequently wielded to influence public opinion and policy. It is therefore important to clarify several persistent problems afflicting that body of research literature. These sow confusion and help perpetuate popular misconceptions about the danger of violent games (Olson, 2004). The problems start with the meaning of aggression.

"Aggression" is a flexible English word that covers a range of actions, from healthy self-assertion to harmless rough-and-tumble play to violence. For this reason, some researchers are careful to define their terms; for example, in

a study of violent content in E-rated (for all ages) games, Thompson and Haninger (2001) did not count aggressive behavior in sports games as violent content, because there was no intent to harm.

Other researchers present aggressive thoughts, feelings and behaviors as equivalent in importance, treat all three as valid surrogates for real-life violence, and make the highly questionable assumption that reducing these factors will reduce harm (Anderson, 2004). But such conflation of thoughts, feelings and behaviors is contrary to the tenets of both behavioral science and law. Few parents, for example, have never thought fleetingly during moments of stress about doing harm to their own children. Yet we acknowledge that there are dramatic differences between and consequences for having such thoughts or feelings, and acting upon them.

Measuring aggression and violence

Another problem is vague and potentially invalid measures. Ferguson and Rueda (2009) attempted to validate the modified Taylor Competitive Reaction Time Test (TCRTT) as a measure of aggressive behavior for college students, as used in many of Craig Anderson's experimental studies. They found that the TCRTT lacked convergent validity with measures of trait aggression and violent acts, and with neuropsychological outcomes predictive of impulsive violence. Ferguson & Rueda also point out that the TCRTT lacks a standardized measuring format. It can be (and has been) used to measure "aggression" in multiple ways that allow researchers to derive a variety of total scores — and thus to present results in the form most favorable to their hypothesis.

A related problem is overreliance on statistical significance to assert the importance of study findings. In popular English, "significant" means important or meaningful. Statistical significance, on the other hand, is a mathematical concept that has no bearing on the practical importance of a finding. Anderson and colleagues have not clarified this difference in meaning when using research findings to persuade policymakers and the public of the dangers of video games.

The concept of effect size, which has more bearing on practical significance, is not well understood by the public. Anderson and Bushman (2001) have sometimes admitted that their experimental studies of violent video games and aggression have small effect sizes. But by assuming that everyone is at risk of harm from media violence, they claim that small effect sizes add up to large harms when millions are exposed. Returning to their school shooting leitmotif, they assert that "it takes only one or two affected students to wreak murderous havoc in a school" (p. 482). Following this logic, all kinds of activities and images would be outlawed, including — according to Anderson's own research — pictures of guns and even the word "gun" (Anderson, Benjamin, & Bartholow, 1998).

Anderson and colleagues (e.g., Anderson & Gentile, 2008) have dismissed criticisms that their experimental studies lack external validity, despite obvious obstacles to generalizing these findings to the wider population of children and adolescents. The effects of 15 minutes of lab-based play

of an assigned, presumably unfamiliar game hardly seems relevant to assessing the influence of games children choose to suit their own feelings and goals and play for varying time periods in self-selected settings, often with friends or siblings, over months or years. (Olson et al., 2009).

There is also the issue of developmental stage; the brains of 13-year-olds are quite different from those of college students, and there may be critical or sensitive stages when violent games might be particularly harmful or benign. Anderson et al. (2008) minimize the importance of developmental differences, stating that the "psychological mechanisms postulated as underlying effects of violent media are the same for each age" (p. e1068), including priming processes and the learning of aggression-related scripts.

Common threats to external validity in survey research (Anderson et al., 2008) such as sample representativeness, response rates and seasonal differences (in "longitudinal" studies lasting three to six months) also go unaddressed.

Finally, there is the issue of causation and direction of causality. Anderson and Gentile (2008) reject "correlation is not causation" as a "glib phrase" and "oversimplified mantra taught to introductory psychology students" (p. 294). They are confident that the theories they have developed and the alternative explanations they have hypothesized are adequate to the task. The fact remains that, for example, violent game content could influence later aggressive thoughts or actions, or aggressive or hostile adolescents may be drawn to violent games—or as suggested by Adachi and Willoughby's (2013) research, both may sometimes be true.

Singling out video games as uniquely harmful

In 2011, the United States Supreme Court ruled on an appeal of a California law (Brown v. Entertainment Merchants Association) that would have put in place legal restrictions preventing the sale of some violent video games to children under 18. (Unlike many countries, video game ratings in the U.S. are meant solely to provide guidance to parents, although some retailers have voluntary policies against selling Mature-rated games to children.) The Court invalidated the proposed law on the grounds of freedom of speech, but also gave detailed comments on the inadequacy of research presented in support of the law: primarily studies by Craig Anderson and his colleagues (Ferguson, 2013).

The court's written opinion stated that these studies "do not prove that violent video games *cause* minors to *act* aggressively" [their emphasis]. Rather, the studies "show at best some correlation between exposure to violent entertainment and minuscule real-world effects, such as children feeling more aggressive or making louder noises in the few minutes after playing a violent game than after playing a non-violent game." Finally, and perhaps most importantly, "these effects are both small and indistinguishable from effects produced by other media", (Brown v. EMA, 2011, Opinion of the Court, pp. 12–13) as shown by studies of popular children's cartoons, E-rated video games such as *Sonic the Hedgehog*, and

even exposure to photographs of guns — and, the Court noted, Anderson has himself admitted as much.

A recent paper by Bushman, Jamieson, Weitz and Romer (2013), following the pattern of earlier articles on video game violence, begins with an anecdote about a "shooting spree": creating an implicit link between a mass murder event (in this case, a 2012 shooting in a movie theater in Colorado by a graduate student in neuroscience who had a history of significant mental illness) and violent content in media. The authors go on to report a content analysis of the amount of gun violence, defined as shooting a gun and hitting a living target in a non-hunting context, in top-grossing films from 1950 to 2012. They report a linear increase in gun violence in these films. They also note that since 2009, films rated PG-13 (parental guidance suggested, for ages 13 and up) feature as much or more gun violence as films rated R (restricted to ages 17 and older). The authors "predict" that such films will increase young people's interest in acquiring and using guns, and that exposure to images of guns may increase aggressive behavior. This is not consistent with the idea that violent video games warrant special scrutiny.

Adding the criminal justice perspective to the debate

Over decades, media violence research appears and vanishes from journals in various disciplines, moving from sociology and education to psychology and communication to pediatrics and back again (J. Anderson, 2008). However, the topic is notably absent from journals focusing on criminal justice. Despite the repeated emphasis on "school shootings" in journal articles about video game violence, the experts in such matters — criminologists — are not convinced.

The U.S. Secret Service and the Federal Bureau of Investigation (O'Toole, 2000) both reviewed the issue, and found that, aside from male gender, there was no clear "school shooter" profile. For example, looking at 37 incidents across the U.S. from 1974 to 2000, the Secret Service (Vossekuil et al., 2002) found that over half of attackers had expressed interest in some type of violent media. Twelve percent were interested in violent video games, a quarter liked violent books or movies, but the largest proportion (37%) were engaged by their own violent writings, in the form of school essays, poems or journal entries. Given that millions of people play violent video games, and almost none commit murder, logic points to a combination of mental illness or brain disease, a noxious social or family environment, and access to deadly weapons as more likely (and sufficient) contributors to these shootings.

The decline in youth aggression and violence

Aggressive behavior among youth is in decline. In the United States, the Health Behavior in School-Aged Children study (Perlus, Brooks-Russell, Wang, & Iannotti, 2014) looked at large, nationally representative samples of children in grades 6 to 10 (aged 11 to 16), and found a decline in physical fighting and bullying from 1998 to 2010. Similarly, the national Youth Risk Behavior Surveillance survey (Kann et

al., 2014) of children in grades 9 to 12 (ages 14 to 18) showed a significant linear decrease (from 42.5% to 24.7%) in physical fighting from 1991 to 2013. There were also significant linear decreases in other indicators of aggressive behavior, such as reports of being threatened or injured by a weapon on school property (the only location measured) and of being injured in a fight.

The most recent U.S. government report of youth arrest statistics found that "the number of juvenile violent crime arrests in 2011 was less than any of the previous 32 years and 15% less than the previous low point in 1984". The number of arrests for aggravated assault (involving using a deadly weapon and/or intending to or actually inflicting serious injury) in 2011 was just half that of 1994 (Puzzanchera & Sickmund, 2013). Moreover, according to the Federal Bureau of Investigation, "despite periods of copycat shootings during the late 1990s and 2007 to 2008", homicides in schools have actually declined since 1994 (Booth, Van Hasselt, & Vecchi, 2011). What has increased is not school shootings, but the relentless media coverage of such crimes (Lawrence & Mueller, 2003).

These U.S. trends regarding harmful aggressive behavior are similar to those seen internationally. For example, a review of data from youth self-report surveys in 27 countries (Molcho et al., 2009) found "a clear and significant decrease in involvement in bullying behavior in most European and North American countries" (p. 233) between 1993/94 and 2005/06, including both occasional and chronic bullying. Some of this decrease may be due to bullying prevention programs.

Better-supported causes of aggressive behavior and violence

Lung cancer was a relatively rare disease before the wide use of cigarettes; by contrast, violence was endemic before the invention of video games (Ferguson, 2002). Looking up the vaguely defined keyword "aggression" in academic databases brings up many articles on media violence. However, when criminologists look at causes and prevention of physical aggression and youth violence, media influences are scarcely mentioned. Researchers and educators who study ways to prevent youth violence and bullying typically do not include video games (or other media) as a risk factor when conducting research or designing prevention programs (Finkelhor et al., 2014).

What factors do they consider? The U.S. Office of Juvenile Justice & Delinquency Prevention's research program on the causes and correlates of violence (Thornberry, Hulzinga, and Loeber, 2004) emphasizes child maltreatment — including physical abuse, sexual abuse and neglect — and gang membership (peer delinquency) as causes of delinquent behavior.

A review of the epidemiology of juvenile violence (Farrington & Loeber, 2000) lists additional risk factors such as impulsiveness, poverty, alcohol use, and living in a high-crime area. They call for research that looks through a different lens: Why do some aggressive children not become violent adolescents?

The problem of entrenched viewpoints: Finding a path forward

People who have based their careers on condemning violent video games are

undeterred by contrary evidence, court rulings, or plummeting crime rates. A 2014 updated edition of Stop Teaching Our Kids to Kill states, "we have the same goals as our original 1999 edition — but with much more urgency. Incredibly, misconceptions and misinformation still abound about media violence...." The school shootings of the late 20th century are directly linked to "mall massacres, workplace shootings and college rampages. Why? Because we have not done enough to address the root cause of the problem. And that root cause is the steady diet of violent entertainment that our kids see on TV, in movies, and in the video games they play." The authors state that "crime is 'down' — so what?" and make a series of attacks on the validity and relevance of the same crime statistics sources they relied on to bolster their anti-media-violence arguments in 1999.

Even though current science is inadequate to address whether or how much violent video games may contribute to a particular crime (Anderson & Gentile, 2008), the frequent linking of school shootings to video games in academic articles gives the strong impression to the public that without violent games, these crimes would not have happened.

Unfortunately, evidence suggests that the inconclusive nature of evidence linking violent video games to aggression, instead of calming debate, actually inflames it. Greitemeyer (2014) asked 662 participants to state whether they believed that violent video games increase aggression. Then, he asked participants to read and assess two opposing summaries of fictitious studies on video games; each summary included discussion of mixed results or uncertain interpretations. Not only did subjects gave higher ratings to the study summary that fit their pre-existing beliefs, but they actually became more convinced of the correctness of their initial positions. The results of Greitemeyer's experiment are all-too-easy to generalize to real life, as we see worsening polarization in the research literature.

Instead of debating the nature, quality and inevitable limitations of the scientific evidence, Bushman & Pollard-Sacks (2014) focus on semantics (i.e., that the minimal effects of video game violence on aggression in laboratory studies should not be called "trivial" – a case Bushman has been making since 1997's "External Validity of 'Trivial' Experiments"). They insist that the sheer number of articles published by researchers who agree with their views proves that their arguments are stronger than those of researchers who disagree.

A small number of politically active scholars have long made unwarranted and premature claims of "scientific consensus" on the effects of video game violence on aggression. For example, in 2005, Carnagey and Anderson stated that "A clear consensus has already been reached: Playing violent video games increases aggression." Cantor (2000) made a similar statement about media violence in general.

Most recently, Bushman, Gollwitzer and Cruz (2014) stated definitively, even in the title of their article, that "There is broad consensus: Media researchers agree that violent media increase aggression in children, and pediatricians and parents concur." But is such a claim supported by data — even the data provided by those authors?

First there is the question of whether facts can be inferred solely from a consensus of opinions. This is at the core of the scientific method. A generation ago, an overwhelming consensus of physicians and patients would have strongly agreed that peptic ulcers are caused by stress — a conclusion reached largely by casual observation of apparent correlations. Yet newer data have shown that a bacterium, H. pylori, is the most common cause. The consensus was wrong.

Next, there is the question of the nature of a consensus. The survey results presented by Bushman et al. (2014) state that "66 percent of researchers either strongly agree or agree that violent [video] games increase aggression in children." The remainder either disagreed or had no opinion. When asked vague questions with undefined terms (e.g., Which games? Which children? What constitutes aggression? How is aggressive behavior different from violent behavior?), an agreement by two-thirds of respondents hardly constitutes broad consensus, as was pointed out by Etchells and Chambers (2014) in their critique of the study.

Also, were these "media researchers" really researchers? The media psychologists surveyed were a convenience sample drawn from members of the Society for Media Psychology and Technology, a division of the American Psychological Association. Yet few of those self-identified media psychologists are researchers; most are clinicians. Of those who are researchers, few focus on social or behavioral effects of electronic media. Similarly, the communications researchers were drawn from members of the mass communication division of the International Communication Association, which focuses on electronic, cinematic and print media. Because only a minority of those respondents is likely to have knowledge of or even direct access to research data on media and youth violence, their opinions are simply that: opinions, and are likely to be influenced by portrayals of such relationships in the popular press. The authors combined the two groups under the term "media researchers" without determining how many of them actually did research in this or any other area.

Similarly, few pediatricians and even fewer parents are likely to be familiar with the research literature on links between mass media and aggression among children. While they clearly had opinions — media violence is an emotionally resonant issue — those opinions are not especially valuable as scientific data points.

In search of shared goals

As with previous concerns over the behavioral effects of 19th century pulp fiction, early films, comic books, rock & roll, television and even the introduction of the telephone, those taking a protective stance on video games are acting with the best of intentions. No one wants to see children behave destructively or become victims of violence. That's why focusing on media as a purported cause is so tempting. As Anderson and Gentile (2008) note, exposure to media violence is easier and cheaper to modify compared to other (e.g., societal, genetic, familial) risk factors for aggression and violence. Perhaps we can find common ground in educating parents about, for example,

the existence and use of built-in parental controls in video game consoles and computers.

However, a *disproportional* focus on publicizing the dangers of media violence is not harmless. As Kutner and Olson (2008) note, "Focusing on such easy but minor targets as violent video games causes parents, social activists and public policy makers to ignore the much more powerful and significant causes of youth violence that have already been well established.... In other words, we spend time, money and energy focusing on the wrong things" (p. 190).

In the past, public policies were prematurely influenced by well-intended but largely emotional arguments rather than scientific data. The "half-dime novels" that triggered book burnings and draconian laws such as the Comstock Act of the 1870s are now museum exhibits. What we now think of as "classic films" spawned the creation of state-based censorship boards and the National League of Decency to decide what motion pictures could contain. In the mid-20th century, the U.S. Senate held hearings on the purported effects of comic books, and the New York state legislature passed a bill to make it a crime to sell comics that might incite minors to violence or immorality.

In retrospect, such moral panics in response to new media seem ill-considered if not bizarre. The best of intentions led to poor public policy because the claims made by most of those involved felt correct or even obvious, but were not supported by scientific evidence. Through caution, self-reflection, and welcoming a wider range of viewpoints, we may avoid falling into the same trap with video games.

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Точки зрения и острые вопросы в исследованиях насилия и агрессии, связанных с компьютерными играми

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Резюме

Исследователи в разных областях знания подходят к тематике агрессивных компьютерных игр и насилия с различных точек зрения, используя разнообразные методы и преследуя разные цели. Специалисты в области экспериментальной психологии стремятся проверять теории в контролируемых условиях и полагают, что все дети подвержены риску проявления насилия во время игры. Они весьма энергично настаивают на том, что следует ограничить воздействие на молодежь содержательной стороны (контента) агрессивных компьютерных игр. Специалисты по прикладным дисциплинам, таким как здравоохранение, клиническая психология или криминология, полагают, что эффекты компьютерных игр (негативные или позитивные) неоднозначны, они зависят от конкретного ребенка, а также от обстоятельств и от содержания игры; такие специалисты стремятся выделить паттерны высокого риска путем полевых, а не лабораторных исследований. Эти разные подходы объясняют разногласия касательно связи, если таковая имеется, между агрессивными компьютерными играми и насильственным поведением. Некоторые разногласия можно сгладить путем формализации определений и методов. Например, путаница возникает, когда исследователям не удается четко определить понятие «агрессия», когда агрессивные мысли, чувства и поведение рассматриваются как часть континуума или когда агрессия приравнивается к враждебному намерению или насилию. Ряд данных свидетельствует, что исследователи насилия в средствах массовой информации, как и все другие люди, склонны обращать внимание, прежде всего, на такие факты, которые поддерживают их точку зрения. Активный поиск общей платформы и привлечение новых исследователей из различных областей будут способствовать развитию данной сферы знаний.

Ключевые слова: видеоигры, насилие в средствах массовой информации, агрессия, компьютерные игры, предвзятость в исследовании.