On September 16, 2013, Aaron Alexis, a 34-year-old civilian subcontractor entered the Navy Yard in Washington, D.C., and killed 12 people before being shot himself by police. Reports on the shooter suggested he may have been delusional and had a history of several past angry outbursts that came to the attention of law enforcement (Bothelo & Sterling, 2013). Briefly, speculation arose that Alexis may have played military-themed shooter games and that these games may have influenced his behavior. After the shooting, one scholar speculated that factors such as mental illness likely contributed to the shooting, “but it isn’t hard to believe that video game use may have been a contributing factor,” and speculated that such games might not only contribute to the motive but also train shooters to be more accurate (Bushman, 2013). Claims about violent video games in the Alexis case were based mainly on rumor, however, not facts, and unlike the previous 2012 Sandy Hook shooting, the issue of video game violence did not get much traction among lawmakers (Palmer, 2013) as Alexis’s considerable mental health problems became clearer. Nonetheless, the D.C. Navy Yard shooting fit a common pattern, in which news media and some scholars zeroed in on the issue of video game violence before how much exposure the shooter actually had to violent video games was even clear.

Furor over the issue of video games in the Navy Yard case was likely primed by the previous year’s Sandy Hook shooting, in which a 20-year-old male killed 20 children and six adults at Sandy Hook Elementary, as well as his mother before killing himself. As in the Navy Yard case, speculation about shooter Adam Lanza’s exposure to video games began in earnest. As with the Navy Yard shooting, such speculation was based on rumor rather than on fact, but politicians, scholars, and journalists all contributed to fueling this speculation. Most pronounced were the efforts of the National Rifle Association (NRA) to shift blame for the Sandy Hook shooting away from real guns and onto the imaginary guns of video games (see Beekman, 2012). But this effort was abetted by politicians such as Senator Rockefeller or Congressman Wolf, who called for ‘studies’ linking violent video games to societal violence in language which made clear the results they wanted to see. Journalists were also able to find scholars willing to speculate that...
violent video games may have been a contributing factor in the Sandy Hook Shooting. These news headlines, political legislation, and scholarly speculation continued for nearly a year while the official investigation report was unavailable.

When the official investigation report was released in November, 2013 (Office of the State’s Attorney Judicial District of Dansbury, 2013) it was revealed that, contrary to numerous reports and rumors, Adam Lanza preferred nonviolent video games. He did have a variety of video games in his home, both violent and nonviolent (as do most young males), but the investigation report specifically noted that he spent most of his time playing nonviolent games such as Dance, Dance Revolution and Super Mario Brothers. A release of investigation documents a month later similarly contained little evidence that violent video games were a main focus of the investigation, and in some cases, investigating officers appear to warn victims’ families not to pay much attention to video game or other ‘hoax’ theories circulating in the news. The official investigation report did not link video games to the shooting, nor did the investigation report substantiate rumors that Lanza had learned to swap half-empty magazines from shooter games.

Unfortunately, the official investigation report (like the Virginia Tech investigation report of 2007) received relatively little coverage. Perhaps as a consequence, some sources (e.g., Bates & Pow, 2013) have continued to release apocryphal and unsubstantiated reports about Lanza using violent video games to train for the Sandy Hook shooting.

These tragic cases are ‘classic’ examples of how moral panics unfold. Driven by a horrible and frightening crime, the public seeks answers for how such an event happened and how they might be prevented in the future. Speculation quickly focuses on popular media, largely fueled by rumor and careless speculation. Statements by lawmakers, journalists, and even scholars progress rabidly without waiting to hear the actual facts from the investigation, thereby creating substantial ‘buy-in’ among all these groups on a preexisting narrative. When details finally emerge that conflict with that narrative, they are largely ignored. In this chapter we discuss moral panic theory, particularly as it relates to panics over video game violence in the wake of mass shooting events. We discuss the social purpose of these moral panics and their potential to corrupt the scientific process.

**WHAT IS A MORAL PANIC?**

A moral panic occurs when a social narrative develops to explain a perceived social problem that places blame on a scapegoat with perceived lesser moral value. Moral panics may develop to explain a social issue that does exist in some form, although the magnitude of the problem may be exaggerated (e.g., youth violence) or may effectively create a nonexistent problem entirely out of fantasy (e.g., rainbow sex parties, Satanic ritual abuse).
Moral panics involve a perceived threat to the social order, often involving marginalized groups such as racial, sexual, or religious minorities or involving youth. At the root of most moral panics is some form of ‘folk devil’ or scapegoat. Moral panics typically cast the existing social order as more moral than the scapegoat and present the social group’s cohesion as being threatened by the scapegoat than was typical in the past.

The concept of moral panic is typically ascribed to Cohen (1972), although Cohen’s ideas were further elucidated by Gauntlett (2005). Moral panics are commonly understood as the manufacture of exaggerated fears toward a ‘folk devil’ against which there is moral repugnance (Ben-Yahuda, 2009). Although the phenomenon has received little attention in psychology, it is well accepted within criminology given that crime (including youth violence) is often at the root of such panics. Examples within recent years include panics over juvenile superpredators (Muschert, 2007), the rise of violent juvenile females (Office of Justice Programs, 2008), reverse recorded ‘Satanic’ lyrics in music, satanic ritual abuse (Bottoms & Davis, 1997), beliefs that minority adolescents are targeting strangers in an epidemic of the ‘knockout game,’ and so on. Cyclical patterns of moral panic following the advent of new media—from waltzes to dime novels to movies to jazz and rock and roll to comic books to television to Dungeons and Dragons to Harry Potter—have been well discussed (Ferguson, 2010; Gauntlett, 2005; Kutner & Olson, 2008).

The basic outline of moral panics, the Moral Panic Wheel (Gauntlett, 2005; Ferguson, 2010) is presented in Figure 12.1. The moral panic wheel helps

![Moral Panic Wheel Diagram]
explain how moral panics are developed and maintained over time. In the model, society’s preconceived beliefs, particularly the beliefs of enfranchised older adults, typically drive the moral panic. Since older adults vote, are society’s power brokers, buy newspapers, and so on, their beliefs become primary to sustaining a moral panic. The beliefs of younger adults or youth, or minority groups may differ from the social narrative but, as disenfranchised groups, their beliefs are less influential. These preconceived beliefs effective ‘spin’ the moral panic wheel by creating incentives for three main groups, politicians, journalists, and scholars, to promote the moral panic through the selection of sustaining information through a process of confirmation bias. That is, the social narrative rewards information that supports the moral panic and actively suppresses information that disconfirms the moral panic.

Thus, amid a moral panic, politicians decry the scapegoat. In doing so, they appear to be actively protecting the social fiber against the perceived dangers of the scapegoat and casting themselves as having the moral high ground. Journalists and newspaper editors promote headlines that garner subscriptions and page clicks. When rumors turn out not to be true (as in the case of Adam Lanza’s supposed obsession with violent video games) the new media rarely clear up their error. And scholars also promote themselves as having higher moral ground, but also garner grant funding and political influence by promoting themselves as the fix to a pressing social problem. Voices warning that the perceived problems may not be so severe are typically ignored, at least in the short term.

Moral panics may serve to promote a sense of restored control over uncontrollable phenomena. Particularly in situations in which older adults feel as if they are losing control over a continually developing culture, moral panics may serve to identify “folk devils” (Cohen, 1972) that are purported causes of the perceived problem. Ostensibly by eliminating these ‘folk devils,’ order in society might be restored.

This function is understandable in the context of school shootings. For parents, the notion that they might send their child to school, effectively trusting their child to the safety of others, and yet not receive their child back in good health is terrifying. It is also a situation over which parents simply have no control. By identifying movies or video games as an underlying culprit that could ostensibly be eliminated/censored/regulated, calling for policies limiting violence in the media gives concerned older adults an avenue through which to exercise an illusion of control and reduce their own tension and feeling of helplessness, even when the purported course of action may not be effective.

**VIRGINIA TECH AS A CASE EXAMPLE**

As discussed earlier, the Sandy Hook case presented an example of a moral panic in situ given how rapidly so many stakeholders (including the NRA,
politicians, some journalists, and scholars) leapt to concluding violent video games contributed to the shooting, despite that ultimately Lanza proved to be an unremarkable gamer.

The 2007 case of Virginia Tech presents another example of a media-based moral panic unfolding in situ. In April 2007, 23-year-old Seung-Hui Cho perpetrated one of the deadliest acts of mass murder in U.S. history. Cho, an individual with documented mental health difficulties, fatally shot two students in a dormitory. He then changed his clothes and mailed a package to news media organizations containing his writings and video recordings before entering a classroom building and continuing the massacre. After chaining shut the doors of the building, Cho began shooting students and teachers in the classroom building. There were individual tales of heroism such as instructors Liviu Librescu and Jocelyne Couture-Nowak, who died trying to barricade their classrooms so that their students could escape. Ultimately 32 people were killed in the two buildings, and 17 others wounded before Cho committed suicide.

Exactly what causes an individual such as Cho to commit such a horrendous act is complex. A combination of mental health problems, chronic anger or antisocial tendencies, and ‘injustice collecting’ or deep resentments toward others or society tends to be a common thread among most perpetrators (Ferguson, Coulson, & Barnett, 2011) although even this combination does not allow for the prediction of such crimes without risking false positives. However, soon after the shooting commentators began to speculate that violent video games contributed to the shootings. Perhaps most notable of these were interviews given by ‘Dr. Phil’ McGraw (McGraw, 2007) and prominent antimedia activists and former attorney Jack Thompson (2007), who each directly blamed violent video games, in part, for the shooting. News media, too, began circulating rumors that the shooter was an avid fan of the action game CounterStrike (Benedetti, 2007). Comments by McGraw and Thompson were released before the name of the shooter was even known, whereas news headlines about CounterStrike and other violent video games were produced largely from rumor rather than from official investigation sources. This pattern would be repeated after the 2012 Sandy Hook shooting.

However, the official investigation report released several months later (Virginia Tech Review Panel, 2007) found that Cho was not an avid gamer at all and found no evidence that he played any games other than Sonic the Hedgehog. The official review report received relatively little news coverage (similar to the official Sandy Hook investigation report released by Connecticut). Nonetheless, Virginia Tech is still occasionally mentioned by individuals hoping to link media violence to mass shootings.

AN EXAMPLE OF POLITICIZED SCIENCE

As we noted earlier, moral panics create incentive structures for politicians, journalists, and scholars to present distorted or biased statements
regarding the impact of media on behavior. It is not our intention here to suggest that media have no influence on our behavior at all but, rather, to suggest that societal narratives during moral panics provide incentives that cause statements about media effects to express greater consistency, clear directionality, generalization to real-world behavior and universality than is actually possible given the data available. That is, media may have small, idiosyncratic influences on our moods and behaviors in many to most cases influences that are sought out by the media consumer, but these are often communicated to the public as dramatic, uniform, passively acquired effects. Incentives for scientists are multiform and include obvious opportunities for grant funding, news headlines, and political influence both among the political sphere as well as in the power structure of their professional organizations, but may also include less obvious incentives such as reinforcing value of feeling as if one is crusading for the benefit of children against an ‘evil’ industry. Perhaps the most striking example of this historically is the case of psychiatrist Fredrick Wertham, who testified before Congress in the mid-20th century that comic books caused not only juvenile delinquency but also homosexuality (see Kutner & Olson, 2008). Most media moral panics have been similarly accompanied by doom-laden statements by scholars, if less prominent than Dr. Wertham.

As one example, following Sandy Hook, prominent antimedia politician Representative Frank Wolf commissioned a panel of scholars under the auspices of the National Science Foundation (NSF) to examine contributing factors to mass shootings, including media violence. Representative Wolf, at that time, chaired the committee that oversaw the funding of the NSF (see Wolf, 2013). The NSF panel included two scholars who were prominent antimedia advocates, who each wrote a chapter regarding media effects. Both chapters concluded that media violence may be a contributing factor in mass shootings. However, between them, both chapters cited not a single study that conflicted with the personal views of the authors despite the presence of many such studies including those published in prominent journals in psychology, communication and criminal justice. This is an example of citation bias, an issue Babor and McGovern (2008) refer to as one of the seven deadly sins of academic publishing. The only study disconfirming the NSF authors’ personal views cited in either chapter was Savage and Yancey (2008), which was cited as supporting links between media violence and crime despite the authors’ claim to the contrary. Thus, this NSF report appears to be an example in which a politician pressured a scientific agency to produce a certain result, in part by selecting specific scholars with clear a priori opinions on a topic, rather than selecting a diverse assortment of scholars representing a range of opinions and data.

In a similar vein, we also point out that one of the bedrocks of science is that the null hypothesis is the default, and as any introductory statistics book notes, we are supposed to make our statistical tests difficult to reject the null hypothesis. We find it interesting and somewhat peculiar that the
rules change when it comes to moral panics. In this case, studies supporting the null hypothesis are critiqued and criticized, while those showing even a small statistically significant effects are highlighted as being bulletproof. Basic probability theory, from which all hypothesis tests flow from, clearly indicates that marginally significant effects are much more likely to be incorrect than are null findings.

Ironically, almost simultaneously an anti-media watchdog group, Common Sense Media, also released a review of media violence research (Common Sense Media [CSM], 2013). Although CSM noted its concerns about media violence, it honestly depicted the research as inconsistent and in need of methodological improvement. Thus, CSM made their arguments for concerns about media violence but did so without resorting to distortions of the field. We submit that it is an indication of a serious problem for the field when an antimedia advocacy group whose funding depends on promoting the dangers of media is able to produce a better balanced research report than is a panel assembled by the NSF.

Outside of the issue of these politicized ‘consensus reports’ and similar such reports as the problematic reports produced by the American Psychological Association (APA) and American Academy of Pediatrics (AAP; see Ferguson, 2013), there is simply the ease with which social science can be corrupted by politics and social narratives. The degree to which methodological flexibility, “researcher degrees of freedom” and publication bias can corrupt social science has sparked widespread discussion in the field in recent years (e.g., Ioannidis, 2005; Pashler & Harris, 2012). Although we wish to be clear we believe scholars are acting in good faith, we believe that the fluidity of social science makes the distortion of science of great concern during periods of moral panic.

The end result of such politicalization of science is that findings that accord with the general sentiment are held to different (lower) standards, are more likely to find their way into prestigious journals, and are more likely to be accepted by the academic community than are those that provide contrary findings. To illustrate, a recent study appearing in the highly influential journal Pediatrics revealed a statistically significant association between the number of hours of television viewing during childhood and adolescent and antisocial outcomes in adulthood (Robertson, McAnally, & Hancox, 2013). These findings were widely covered in the media and once again sparked widespread concern with the negative and potentially criminogetic effects of watching television. The problem, however, is that this study was not fully specified and failed to rule out the effects of common confounders—namely, genetic factors. As a result, Schwartz and Beaver (2014) attempted to replicate their findings within a genetically sensitive research design. This research design is capable of controlling for the extraneous influences of genetic factors that were left unaccounted for in the Robertson et al. (2013) study. Using data drawn from the National Longitudinal Study of Adolescent Health, these authors found that after genetic
effects were effectively removed from the statistical models, there were not any significant associations between TV viewing and the antisocial outcomes. What these findings suggest is that the link between TV viewing and antisocial behaviors is not direct and causal, but rather is attributable to model misspecification owing to unmeasured genetic influences.

Other studies have produced similar results, essentially showing that the effects of the media on antisocial behaviors are nonexistent (Markey, Markey & French, 2014). The problem, of course, is that these findings go against the grain and undermine the moral crusade against video games, television, and other forms of media. Rather than believing that the null hypothesis could be true, these moral crusaders attempt to downplay the findings generated from this body of research through the use of propaganda and other nonscientific methods (e.g., ad hominem attacks). Unfortunately, these techniques are frequently effective, resulting in nonsignificant effects being marginalizing or failing to make their way into as prestigious and influential journals. Consequently, a biased knowledge base is created, one that is not the result of rigorous scientific studies, but rather that is the result of a politics, ideology, and moral panics.

A WAY FORWARD

We wish to be clear that we do not believe that social science is without value or to embrace postmodern thought that all ways of knowing are equal. However, it is our contention that moral panics can produce false knowledge and that social science can be vulnerable to political pressures, funding opportunities, social narratives, and, indeed, moral sanctimoniousness. Being alert for these issues will only strengthen social science and allow us to discriminate the wheat from the chaff. In the following, we offer a few thoughts on how we might move forward.

It is time for a sociology of media violence research paradigm. Given that we have had considerable problems with objectivity and acrimony within media effects research, we argue it is time to make media effects research itself the subject of study. Understanding the ways in which social, political, and professional pressure influence and distort social science may provide a path forward for making research more objective in the future. Such a research paradigm might involve several lines of research.

First, straightforward sociological analyses could examine statements made by scholars in support of or against media effects theories and how these correspond to periods of moral panic. Given that media panics tend to be generational (Przybylski, 2014), can we identify patterns in scholars’ communications that fit along generational lines? Did scholars in the 1950s warn society against comic books, but largely scoff at the idea of their ‘harmfulness’ by the early 2000s. Did scholars largely support the ‘Tipper Gore’ hearings of the 1980s, which attacked bands such as Twisted
Sister and Cyndi Lauper, but now consider those musical acts harmless? Changes in the rhetoric of the video game violence field pre and post the 1999 Columbine Massacre have already been discussed (Ferguson, 2013). Understanding these trends better may help to understand how social science itself responds to social narratives.

Second, researchers may wish to investigate the attitudes of researchers and clinicians themselves to see how a priori opinions, groupthink, the desire to be morally superior or to fit in with the academic culture, personality variables, even aggression itself may relate to beliefs about media violence or other media effects. As one issue, do scholars who already have a strong opinion about effects tend to get involved in the field, but scholars with more neutral views stay out of the field? Also do scholars with certain cultural beliefs or backgrounds tend to be more inclined to embrace effects models? Furthermore, how are decisions regarding issues like policy statements made by professional organization stakeholders such as the American Psychological Association?

THE NEED FOR BETTER STANDARDIZATION

The lack of standardization in the measurement of both aggression and media violence as constructs is, by now, well documented (Ferguson, 2013). The lack of standardized measurements clearly has the potential to inflate effect sizes through 'cherry-picking,' even in good faith, of results that best fit a scholar’s a priori beliefs. This issue relates directly to the “methodological flexibility” problem discussed in social science more broadly (Simmons, Nelson, & Simonsohn, 2011).

Related to this is the fluidity of the terms used in media effects research. The difficulty in using rather weak measures of ‘aggression,’ such as delivering annoying bursts of white noise to others or filling in the missing letters of words (so that kill is more aggressive than kiss) to societal violence is, by now, difficult to ignore (Farley, 2012). Yet, precisely these leaps by scholars, such as in the NSF report discussed earlier, persist particularly following incidents of mass homicide. However, concepts such as ‘media violence’ or ‘violent video games’ likely have greater moral salience than they do conceptual utility. Such terms are morally laden, and thus potentially distorting. But they are also conceptually negligible, presenting all such media with any violent content as part of a ubiquitous whole. ‘Violence’ in the scholarly community is often defined so broadly that almost all media is ‘violent media.’ For example, in one recent murder trial in which an ultimately convicted murderer attempted to place blame on violent video games, a scholar called to testify in the case had to acknowledge that even Pacman could be considered a violent video game under scholarly definitions (Rushton, 2013). There is a pressing need for research in the field to get past sweeping moralizing concepts into a more sophisticated analysis of media effects.
THE NEED FOR BETTER RESEARCH DESIGNS

In addition to more accurate measurement, it is also essential that media violence research employ more rigorous research designs capable of ruling out common sources of confounding. All too often, the research designs that are used to examine media effects are set up so that a statistically significant influence will be detected. For example, studies routinely omit key covariates that could confound the significant media effects, they employ research designs that are unable to establish temporal ordering, and they create experiments that would never translate into experiences outside of a laboratory, or involve close pairing of independent and dependent variables such that hypothesis guessing is easy for participants. When these limitations are addressed, the significant effect often evaporates or is attenuated significantly. Against this backdrop, we recommend that all future studies on media effects employ research designs that are much more rigorous and defensible than the ones that are currently widely used.

THE NEED FOR A MORE TRANSPARENT PEER-REVIEW PROCESS

It may be helpful to reconsider the peer-review process used in the production of published research. We argue that, at present, too many weak studies making alarmist claims are being published. Arguably this is because of the selection of reviewers, who are ideologically invested in the effects paradigm rather than the careful selection of neutral reviewers. This is not happening for every article, of course, but too many basic problems including ethical issues such as citation bias (see Babor & McGovern, 2008) and blatantly alarmist claims persist in the published literature.

Perhaps more critically, the production of policy statements based on media, not just media violence, by professional advocacy groups such as the AAP and APA need to be reexamined. In the past such groups appear to have allowed such policy statements to be written by narrow groups of scholars heavily invested in effects views without ensuring dissenting voices (Ferguson, 2013). The potential for groupthink and confirmation bias in such an approach is obvious. Unfortunately, this problem continues to persist. The APA’s most recent effort to revisit their policy statements on media violence, while avoiding media scholars, appeared heavily weighted toward committee members invested in effects views. Of a seven-member task force, two members had signed the amicus brief supporting California’s efforts to regulate violent video games in *Brown v. EMA* (2011), the Supreme Court case in the United States that was ultimately very critical of video game research. One other member is a coauthor of the problematic NSF report mentioned earlier, and a fourth has ties with antimedia scholars and has made anti-media statements in the press (e.g. Graham, Berman, & Huesmann, 1999). Thus, the APA has failed an opportunity to assemble a
neutral review committee and has managed, instead, to present the image of attempting to ‘stack’ the committee with a prior views while arguing it is a neutral committee. Of course, in fairness, we do not know the deliberations of the task force, which have not been transparent, given that the task force has not consulted with scholars, made deliberations or internal communications public, nor otherwise opened their proceedings to public scrutiny. But this issue argues that it may be time to revisit the issue of policy statements, whether they are informative or misleading, and whether they help or damage the reputation of social science. We advocate that policy statements should be avoided, given their problematic history and the degree to which they set forth a conflict of interest for professional advocacy organizations that also publish research and may be incentivized to only publish research supporting their policy statements.

Concluding Remarks

That media are often the target of moral panics and that scholars often participate in the rise, continuance (and ultimately fall) of moral panics is well documented. Perhaps most unfortunate, however, is the degree to which scholars and professional advocacy organizations such as the APA and AAP have failed to learn from history and continue to promote moral panics. We argue that the efforts of individual scholars and professional advocacy groups are not only made in good faith but also reflect the incentive structures set forth by moral panics for scholars to continue and promote such panics. A clearer understanding of moral panics and social science’s role in them may help break the cycle in the future.

REFERENCES


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