A CLOSER LOOK

Effects of violent video games

In a 'highly polarized research field,' scientists take sides over the games' effects on children who play them.

By Jill U AdamsSpecial to the Los Angeles Times

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The U.S. Supreme Court agreed last week to hear a case on California's attempt to restrict sales of violent video games to minors. Both the California lawmakers who approved the law in 2005 and the U.S. 9th Circuit Court of Appeals judges who overturned the law in 2009 claimed that scientific research was on their side.

Lawmakers and judges aren't the only ones at odds over how to interpret research studies. Scientists who study media violence and its effects on children also are divided on what their results mean.

"It's a highly polarized research field," says Chris Ferguson, a psychology professor at Texas A&M International University in Laredo.

A number of studies have shown that watching a lot of violence on television or playing violent video games such as Grand Theft Auto and Manhunt produces aggressive tendencies in kids. Rowell Huesmann, a professor of communications and psychology at the University of Michigan in Ann Arbor, says that the strength of the evidence is on par with data that say smoking cigarettes causes lung cancer.

Other researchers pooh-pooh such assertions and say that scientific findings have been decidedly mixed — with several studies finding no effects of violent video games on children and teens who play them.

In addition, such critics say, when effects are observed in studies, they have little or no relevance to psychological states that trigger violence in real-life situations.

"When scholars are making some of the claims that they make" — such as how consistent and strong the evidence is or that the size of effects can be compared to the link between smoking and lung cancer — "they are being deeply dishonest with the American public," Ferguson says.

Given these polarized opinions, it's not surprising that parents, especially those whose kids want to play the often violent video games their friends are playing, struggle to sort out what to do. Here's a closer look at whether playing violent video games is putting America's youth at risk.

American children spend plenty of time in front of screens, be it playing video games or watching television. One estimate says kids are playing video games for 13 hours each week, on average, and that more than 75% of teens who play report playing games rated M (for mature) by the Entertainment Software Rating Board, which often contain intense violence, blood and gore.

Research has shown that immediately after playing a violent video game, kids can have aggressive thoughts, angry feelings and physiological effects such as increased heart rate and blood pressure. In addition, studies that survey large populations of kids on their game-playing habits and measure aggressive personality traits or self-reported aggressive acts — physical fights, arguments with teachers — often find an association between games and aggression.

And yet, even when a strong correlation is found, researchers cannot say that playing violent video games *causes* such behavior. It could be that kids with aggressive tendencies gravitate toward playing the most violent games.

The most compelling studies are ones that track kids over a period of time. For instance, a 2008 study published in the journal Pediatrics followed 362 third-, fourth- and fifth-graders in the U.S. and 1,231 youths ages 12 to 18 in Japan over a single school year.

Early in the school year, kids were asked about what games they played and for how many hours. The more violent content they were exposed to, the more likely subjects were to report later in the year that they'd been in physical fights.

"Is that every kid? No, it's not every kid," says study co-author Douglas Gentile, a psychology professor at Iowa State University in Ames. But the trend was statistically significant for both boys and girls, he says, and other studies that have lasted two years have found similar effects.

These so-called longitudinal studies start, at least, to address the what-comes-first problem, because they measure game-playing first and assess aggressive behavior later. Still, the approach doesn't solve the problem completely.

For instance, it can miss factors that influence violent video game-playing and aggressive behavior — absent or abusive parents, perhaps.

It is also hard to assess the strength of any video game aggression effect because exposure to violent games varies so much. Gentile says violent video games account for about 4% of the differences among kids in terms of aggressive behavior. Some researchers think the number is higher — Huesmann puts it at more like 10%. Neither number seems very high, but then everyone agrees that aggression is a complex human behavior that is going to have multiple causes.

"Usually when people are violent there's a whole set of converging factors," Huesmann says. "No reputable researcher that I know is arguing that media violence or video-game violence is the most important factor." Other known factors more strongly linked to child aggression are a history of abuse, poverty, genetics and personality — and the risk climbs higher when several factors are present in combination.

Still, Huesmann adds, "what's really irritating is when people say it isn't a factor at all — because the evidence is so compelling."

Ferguson, meanwhile, puts the strength of the effect squarely at 0%. He says that people are inventing a crisis where there is none.

"As video games have become more violent and more sophisticated and the sales of video games have skyrocketed in the last few decades, youth violence has plummeted," he says, citing evidence compiled by various federal agencies.

Ferguson — who is not the only scientist critical of violent-video-game research but may be the most vocal — says some researchers cherry-pick data, measuring a lot of effects and analyzing only the ones that show a difference between kids who play violent video games and those who don't. Further, he says, some reviews of the scientific literature exclude studies that show no effect or, in a few cases, an opposite effect (i.e., that consumers of media violence showed less aggression). He published a detailed critique of these issues in the March issue of the journal Psychological Bulletin.

While researchers and legal types continue their row over violent video games, there are things parents can do, Gentile says.

Setting limits on the amounts of exposure is important, he says — the American Academy of Pediatrics recommends that kids' exposure to screen time (meaning TV, video, computer and video games) be limited to one to two hours a day. And so, Gentile adds, is "setting limits on content, and talking to kids about what they're seeing and hearing.

"Challenge it and make kids think it through critically."

health@latimes.com