

Violent Video Games: Effects Research

Presenter: [Craig A. Anderson](#), PhD, Iowa State University

[View presentation](#)

Effects research on violent video games serves as the foundational anchor for the Summit's focal points in research, education and public policy and for the 10-year action agenda.

To establish that foundation, the Summit presentation on violent video games effects research covered these areas: methods of research, a summary of current literature, new research findings, meta-analyses and comparative studies on media effects. Additional implications for education and public policy, presented by Dr. Anderson, are included under those respective sections.

Research findings on effects

It is important to consider research effects of violent video games in the context of the environment outside of academics. The presentation examined potential reasons for the inconsistency between the universal concern expressed by various public health organizations about media violence versus the general public's apparent confusion about whether there is any potential harm about which the public should be concerned.

Confused public perspective

One persistent problem is many in the lay public, the news media, the video gaming industry and, more recently, judges who have issued opinions on video game restriction legislation, use an inappropriate and outdated notion of "scientific causality." In doing so, they fail to understand that in modern behavioral science, just as in modern medical science, causal factors are usually probabilistic.

As an example, even though not all smokers get lung cancer and some non-smokers do get lung cancer, the public in general understands and accepts the idea that smoking *causes* an increase in the *likelihood* of getting lung cancer. However, the public has failed to accept similar scientific evidence of probabilistic causality in specific cases, such as media violence. Furthermore, many do not understand media violence effects are seen by the research community as one risk factor among many for future aggression and violence.

Media violence research yields consistent results

Two main results, over hundreds of studies and numerous meta-analyses with statistical averaging, are:

- Short-term exposure increases aggression immediately in users
- Long-term exposure increases aggression throughout the life span of users

Video game violence research also yields consistent results

Regardless of research method, existing studies of violent video games consistently find similar increases in aggression and violence.

Clear evidence of psychological effects on children

Numerous national public health organizations have found that violent media are harmful to children.

These organizations include:

- American Academy of Pediatrics
- American Academy of Child & Adolescent Psychiatry
- American Psychological Association
- American Medical Association
- American Academy of Family Physicians
- American Psychiatric Association
- National Institute of Mental Health
- U.S. Surgeon General
- Federal Trade Commission

New research findings

A new book, *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy*, published by Oxford University Press in 2007, compiles a comprehensive review of video game effects literature and examines new research findings in experimental, cross-sectional and longitudinal studies:

- The experimental study found that even children's video games can increase aggressive behavior if they contain lots of violence.
- The cross-sectional correlation study found that high school students who play lots of violent video games are much more likely to be involved in aggressive and violent behavior.
- The longitudinal study found that exposure to violent video games increased aggressive behavior over a five-month period.

Comparison of risk factors for youth violence

To demonstrate the compelling findings of the compilation of violent video gaming effects, two comparisons were provided: one on correlation effect size and another on longitudinal effect size of various risk factors for youth violence.

Effect size

An examination of the relative effect sizes for several public health concerns revealed that violent video game effects were larger than the effects of calcium intake on bone mass or of second-hand smoke on cancer. **Anderson (2004)**

An examination of longitudinal effect sizes revealed that the effect of violent video games on physical aggression is larger than the effects on youth violence of antisocial parents, low IQ or poverty.

Increasing potential for violent media effects

As youth have increasing exposure to violent video games, they face a rising potential for violent media effects. That potential can be seen in a recent Kaiser Family Foundation report, issued in 2005, on a survey of media use, which found 68% of 8- to 18-year-olds have a TV in their bedroom and 66% have handheld video game systems.

Research Citations

Anderson, C.A., Berkowitz, L., Donnerstein, E., Huesmann, L.R., Johnson, J., Linz, D., Malamuth, N., and Wartella, E. (2003). The influence of media violence on youth. *Psychological Science in the Public Interest*, 4, 81-110.

Anderson, C. A., Carnagey, N. L., Flanagan, M., Benjamin, A. J., Eubanks, J., and Valentine, J. C. (2004). Violent video games: Specific effects of violent content on aggressive thoughts and behavior. *Advances in Experimental Social Psychology*, 36, 199-249.

Anderson, C. A., Gentile, D. A., and Buckley, K. E. (2007). *Violent Video Game Effects on Children and Adolescents: Theory, Research, and Public Policy*. New York: Oxford University Press.

Gentile, D.A., and Anderson, C.A. (2006). Violent Video Games: Effects on Youth and Public Policy Implications. Chapter in N. Dowd, D. G. Singer, & R. F. Wilson (Eds.), *Handbook of Children, Culture, and Violence* (pp. 225-246). Thousand Oaks, CA: Sage.