

## Resolution on Violent Video Games

Video game use has become pervasive in the American child's life: More than 90% of U.S. children play some kind of video games; when considering only adolescents ages 12 - 17, that figure rises to 97% (Lenhart et.al, 2008; NPD Group, 2011;). Although high levels of video game use are often popularly associated with adolescence, children younger than age 8 who play video games spend a daily average of 69 minutes on handheld console games, 57 minutes on computer games, and 45 minutes on mobile games, including tablets (Rideout, 2013). Considering the vast number of children and youth who use video games and that more than 85% of video games on the market contain some form of violence, the public has understandably been concerned about the effects that using violent video games may have on individuals, especially children and adolescents.

News commentators often turn to violent video game use as a potential causal contributor to acts of mass homicide. The media point to perpetrators' gaming habits as either a reason that they have chosen to commit their crimes, or as a method of training. This practice extends at least as far back as the Columbine massacre (1999) and has more recently figured prominently in the investigation into and reporting of the Aurora, CO theatre shootings (2012), Sandy Hook massacre (2012), and Washington Navy Yard massacre (2013). This coverage has contributed to significant public discussion of the impacts of violent video game use. As a consequence of this popular perception, several efforts have been made to limit children's consumption of violent video games, to better educate parents about the effects of the content to which their children are being exposed, or both. Several jurisdictions have attempted to enact laws limiting the sale of violent video games to minors, and in 2011 the US Supreme Court considered the issue in *Brown v. Entertainment Merchants Association*, concluding that the First Amendment fully protects violent speech, even for minors.

In keeping with the American Psychological Association's (APA) mission to advance the development, communication, and application of psychological knowledge to benefit society, the Task Force on Violent Media was formed to review the APA Resolution on Violence in Video Games and Interactive Media adopted in 2005 and the related literature in order to ensure that the APA's resolution on the topic continues to be informed by the best science currently available and that it accurately represents the research findings directly related to the topic. This Resolution is based on the Task Force's review and is an update of the 2005 Resolution.

Scientists have investigated the effects of violent video game use for more than two decades. Multiple meta-analyses of the research have been conducted. Quantitative reviews since APA's 2005 Resolution that have focused on the effects of violent video game use have found a direct association between violent video game use and aggressive outcomes (Anderson et al. 2010, Ferguson 2007a, Ferguson 2007b, Ferguson & Kilburn 2009). Although the effect sizes reported are all similar (0.19, 0.15, 0.08, and 0.16, respectively), the interpretations of these effects have varied dramatically, contributing to the public debate about the effects of violent video games.

The link between violent video game exposure and aggressive behavior is one of the most studied and best established. Since the earlier meta-analyses, this link continues to be a reliable finding and shows

good multi-method consistency across various representations of both violent video game exposure and aggressive behavior (e.g., Moller & Krahe, 2009; Saleem, Anderson, & Gentile, 2012). Aggressive behavior examined in this research included experimental proxy paradigms, such as the administration of a noise blast to a confederate, and self-report questionnaires, peer nominations and teacher ratings of aggressiveness focused on behaviors including insults, threats, hitting, pushing, hair pulling, biting and other forms of verbal and physical aggression. The findings have also been seen over a range of samples, including those with older children, adolescent, and young adult participants. There is also consistency over time, in that the new findings are similar in effect size to those from past meta-analyses.

Similarly, the research conducted since the 2005 APA Resolution using aggressive cognitions and aggressive affect as outcomes also shows a direct effect of violent video game use (e. g., Hasan, Begue, Scharnow & Bushman, 2013; Shafer, 2012). Researchers have also continued to find that violent video game use is associated with decreases in socially desirable behavior such as prosocial behavior, empathy, and moral engagement (e.g., Arriaga, Monteiro & Esteves, 2011; Happ, Melzer & Steffgen, 2013).

The violent video game literature uses a variety of terms and definitions in considering aggression and aggressive outcomes, sometimes using “violence” and “aggression” interchangeably, or using “aggression” to represent the full range of aggressive outcomes studied, including multiple types and severity levels of associated behavior, cognitions, emotions, and neural processes. This breadth of coverage but lack of precision in terminology has contributed to some debate about the effects of violent video game use. In part, the numerous ways that violence and aggression have been considered stem from the multidisciplinary nature of the field. Epidemiologists, criminologists, physicians and others approach the phenomena of aggression and violence from different perspectives than do psychologists, and emphasize different definitions of the phenomena accordingly. Some disciplines are interested only in violence, and not other dimensions of aggression. In psychological research, aggression is usually conceptualized as behavior that is intended to harm another (see Baron & Richardson, 1994; Coie & Dodge, 1998; Huesmann & Taylor, 2006; VandenBos, 2007). Violence can be defined as an extreme form of aggression (see Encyclopedia of Psychology, 2000) or the intentional use of physical force or power, that either results in or has a high likelihood of resulting in harm (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002).

Thus, all violence, including lethal violence, is aggression, but not all aggression is violence. This distinction is important for understanding this research literature, which has not focused on lethal violence as an outcome. Insufficient research has examined whether violent video game use causes lethal violence. The distinction is also important for considering the implications of the research and for interpreting popular press accounts of the research and its applicability to societal events.

#### Resolution

Consistent with the American Psychological Association's mission to advance the development, communication and application of psychological knowledge to benefit society and improve people's lives, this Resolution on Violent Video Games finds:

WHEREAS scientific research has demonstrated an association between violent video game use and both increases in aggressive behavior, aggressive affect, aggressive cognitions and decreases in prosocial behavior, empathy, and moral engagement;

WHEREAS there is convergence of research findings across multiple methods and multiple samples with multiple types of measurements demonstrating the association between violent video game use and both increases in aggressive behavior, aggressive affect, aggressive cognitions and decreases in prosocial behavior, empathy, and moral engagement;

WHEREAS all existing quantitative reviews of the violent video game literature have found a direct association between violent video game use and aggressive outcomes;

WHEREAS this body of research, including laboratory experiments that examine effects over short time spans following experimental manipulations and observational longitudinal studies lasting more than 2 years, has demonstrated that these effects persist over at least some time spans;

WHEREAS research suggests that the relation between violent video game use and increased aggressive outcomes remains after considering other known risk factors associated with aggressive outcomes;

WHEREAS although the number of studies directly examining the association between the amount of violent video game use and amount of change in adverse outcomes is still limited, existing research suggests that higher amounts of exposure are associated with higher levels of aggression and other adverse outcomes;

WHEREAS research demonstrates these effects for children older than 10 years, adolescents, and young adults, but very little research has included children younger than 10 years;

WHEREAS research has not adequately examined whether the association between violent video game use and aggressive outcomes differs for males and females;

WHEREAS research has not adequately included samples representative of the current population demographics;

WHEREAS research has not sufficiently examined the potential moderator effects of ethnicity, socioeconomic status, or culture;

WHEREAS many factors are known to be risk factors for increased aggressive behavior, aggressive cognition and aggressive affect, and reduced prosocial behavior, empathy and moral engagement, and violent video game use is one such risk factor;

Therefore,

BE IT RESOLVED that the American Psychological Association (APA) engage in public education and awareness activities disseminating these findings to children, parents, teachers, judges and other professionals working with children in schools and communities;

BE IT FURTHER RESOLVED that APA support funding of basic and intervention research by the federal government and philanthropic organizations to address the following gaps in knowledge about the effects of violent video game use:

- The association between violent video game use and negative outcomes for understudied ethnic and sociocultural populations who may be at increased risk for negative outcomes because of increased violent video game exposure or the presence of other risk factors for aggressive outcomes;
- The nature of the association between violent video game use and negative outcomes for males and females separately;
- The association between violent video game use and negative outcomes for school age and preschool age children;
- The relation between degree of exposure to violent video games and negative outcomes;
- The persistence of negative outcomes over time;
- The relation between game ratings and types, amounts, and degrees of violence present in violent video games;
- The relation between negative outcomes and game characteristics such as properties of the game, including type and degree of violence, how the game is played, and how the game is perceived by the player;
- The intersection of variables related to negative outcomes of violent video game use and the broader context of violence within the games, including choices about targets of violence, game themes, and the development and marketing of games;
- The impact of rapidly changing game technology and formats on users' experience and outcomes;
- The role of competition and cooperation in the association between violent video game use and negative outcomes; and
- The role of media literacy in mediating negative effects associated with violent video game use;

BE IT FURTHER RESOLVED that APA endorses the development and implementation of rigorously tested interventions that educate children, youth and families about the effects of violent video game use; and

BE IT FURTHER RESOLVED that APA strongly encourages the Entertainment Software Rating Board to refine the ESRB rating system specifically to reflect the levels and characteristics of violence in games in addition to the current global ratings.

## **REFERENCES**

Anderson, C.A., Shibuya, A., Ihori, N., Swing, E.L., Bushman, B. J., Sakamoto, A., Rothstein,

- H.R., & Saleem, M. (2010). Violent video game effects on aggression, empathy, and prosocial behavior in eastern and western countries: A meta-analytic review. *Psychological Bulletin*, *136*(2), 151-173.
- Arriaga, P., Monteiro, M. B., & Esteves, F. (2011). Effects of playing violent computer games on emotional desensitization and aggressive behavior. *Journal of Applied Social Psychology*, *41*(8), 1900-1925.
- Baron, R. A., & Richardson, D. R. (Eds.) (1994). *Human Aggression: Perspectives in Social Psychology*. New York, NY: Springer.
- Coie, J. D., & Dodge, K.A. (1988). Multiple sources of data on social behavior and social status in the school: A cross-age comparison. *Child Development*, *59*(3), 815-829
- Ferguson, C. J., & Kilburn, J. (2009). The public health risks of media violence: A meta-analytic review. *The Journal of Pediatrics*, 1-5. 10.1016/j.jpeds.2008.11.033.
- Ferguson, C. J. (2007a). Evidence for publication bias in video game violence effects literature: A meta-analytic review. *Aggression and Violent Behavior*, *12*, 470-482.
- Ferguson, C. J. (2007b). The good, the bad and the ugly: A meta-analytic review of positive and negative effects of violent video games. *Psychiatric Quarterly*, *78*, 309-316. DOI 10.1007/s11126-007-9056-9.
- Happ, C., Melzer, A., & Steffgen, G. (2013). Superman v. BAD man? The effects of empathy and game character in violent video games. *Cyberpsychology, behavior, and social networking*. 1-7.
- Hasan, Y., Begue, L., Scharkow, M., & Bushman, B. J. (2013). The more you play, the more aggressive you become: A long-term experimental study of cumulative violent video game effects on hostile expectations and aggressive behavior. *Journal of Experimental Social Psychology*, *49*, 224-227.
- Huesmann, R. L., & Taylor, L. D. (2006). The role of media violence in violent behavior. *Annual Review of Public Health*, *27*, 393-415. DOI:10.1146/annurev.publhealth.26.021304.144640.
- Krug, E. G., Dahlberg, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R. (2002). *World report on violence and health*. Geneva: World Health Organization.
- Lenhart, A., Kahne, J., Middaugh, E., MacGill, A., Evans, C., & Vitak, J. (2008). *Teens, video games and civics*. Washington, DC: Pew Internet & American Life Project.  
[http://www.pewinternet.org/files/old-media//Files/Reports/2008/PIP\\_Teens\\_Games\\_and\\_Civics\\_Report\\_FINAL.pdf.pdf](http://www.pewinternet.org/files/old-media//Files/Reports/2008/PIP_Teens_Games_and_Civics_Report_FINAL.pdf.pdf).
- Moller, I., & Krahe, B. (2009). Exposure to violent video games and aggression in German adolescents: A longitudinal analysis. *Aggressive Behavior*, *35*, 75-89.
- NPD Group (2011). *Kids and gaming, 2011*. Port Washington, NY: The NPD Group, Inc.
- Rideout, V. (2013). *Zero to eight: Children's media use in America 2013*. San Francisco, CA: Common Sense Media.
- Saleem, M., Anderson, C. A., & Gentile, D. A. (2012). Effects of prosocial, neutral, and violent video games on children's helpful and hurtful behaviors. *Aggressive Behavior*, *38*(4), 281-287.
- Shafer, D. (2012). Causes of State Hostility and Enjoyment in Player Versus Player and Player Versus Environment Video Games. *Journal Of Communication*, *62*(4), 719-737.
- VandenBos, G.R. (Ed.) (2007). *APA Dictionary of Psychology*. Washington, DC: American Psychological Association.