

APA TASK FORCE REPORT on Violent Video Games

APA BOARD OF SCIENCE AFFAIRS (BSA), BOARD FOR THE ADVANCEMENT OF PSYCHOLOGY IN THE PUBLIC INTEREST (BAPPI) 2019 TASK FORCE ON VIOLENT VIDEO GAMES

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APA BSA-BAPPI 2019 Task Force on Violent Video Games

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RECOMMENDATION

After conducting a comprehensive, systematic, and up-to-date review of the violent video game literature (published between January 2014 and March 2019) and extensive discussion, all but one member of the BSA-BAPPI Violent Video game Task Force concluded that recent evidence continues to support the conclusions presented in the *Technical Report on the Review of the Violent Video Game Literature* by the 2015 APA Task Force on Violent Media and the 2015 Resolution on Violent Video Games (see Appendix A). A majority of the members, however, do recommend an addendum to the 2015 Resolution on Violent Video Games to address the appropriate way to interpret its meaning.

Specifically, the group recommends adding, before the beginning of the resolution, the following statement:

Note added in 2020: This Resolution should not be misinterpreted or misappropriated in attempts to oversimplify complex social problems involving violence by attributing them to violent video game use. Doing so is not scientifically sound and draws attention away from other factors that either interact with violent video game use or independently influence aggression, factors deserving of attention by researchers, policymakers, and the public.¹

¹ At its meeting of February 28–March 1, 2020, the APA Council of Representatives considered the recommendation made by the 2019 Task Force. Instead of adopting the Task Force’s recommended statement, the Council of Representatives approved adding the following statement to the 2015 Resolution on Violent Video Games:

The following resolution should not be misinterpreted or misused by attributing violence, such as mass shootings, to violent video game use. Violence is a complex social problem that likely stems from many factors that warrant attention from researchers, policy makers and the public. Attributing violence to violent video gaming is not scientifically sound and draws attention away from other factors.

VIOLENT VIDEO GAME 2019 TASK FORCE REPORT

The majority of Task Force members concluded that no new empirical research has been published since the *Technical Report on the Review of the Violent Video Game Literature* by the 2015 APA Task Force on Violent Media, that substantially alters the report's general conclusions. In addition, three meta-analyses, published between January 2014 and April 2019 (Ferguson, 2015a; Greitemeyer & Mügge, 2014; Prescott, Sargent, & Hull, 2018), provide further evidence for a small, reliable effect of exposure to violent video games on aggressive outcomes in laboratory experiments and cross-sectional and longitudinal studies. Specifically, there is sufficient evidence that playing violent video games increases short- and long-term observed aggression, which was considered by the majority of Task Force members to have the greatest potential clinical and societal relevance. The Task Force observes a number of methodological and theoretical concerns remain in this literature; those concerns continue to animate controversies that are metatheoretical and matters of judgment and, as such are not empirically resolvable.

For the preceding reasons, the majority of the Task Force members recommend that the 2015 Resolution stand as is, but that Council of Representatives consider adding a clarifying statement on how the resolution should be interpreted and used. The Task Force found this statement to be completely in keeping with the findings and spirit of the 2015 Task Force and in no way contradicts the 2015 Resolution. This statement makes the limits of the research more explicit in terms of the claims it supports and does not support.

There was a dissenting opinion, voiced by Babe Howell JD, public member of BAPPI, that the 2015 resolution should not stand. She does not support the existence of any resolution on the topic, citing concerns about the quality of the studies, the magnitude of the effect, and the policy implications of a resolution. Her concerns are so noted by the other Task Force members.

Background

At the Council's 2018 meeting, a motion was moved and seconded to archive the 2015 Resolution on Violent Video Games on the grounds that recent research calls into question the empirical evidence and conclusions upon which the Resolution was based. (See Appendix A for the 2015 Resolution.) Council asked the Board of Scientific Affairs (BSA) and the Board for the Advancement of Psychology in the Public Interest (BAPPI) to comment on the motion. In response, BSA and BAPPI put forth the following substitute motion which was approved by Council:

That Council supports the formation of a task force, appointed by BAPPI and BSA, to conduct a comprehensive, up-to-date systematic review of violent video game literature and to recommend whether the 2015 Resolution on Violent Video Games should be amended.

BSA and BAPPI created a joint Task Force comprised of three members from each Board

to assess whether recent evidence (since 2014) required revisions of the statements made in the 2015 resolution.

To pursue its mission, each Board selected 3 of its members (to comprise the Task Force). After selecting a Chair, the Task Force had several conference calls, which resulted in the decision to conduct a systematic search and evaluation of relevant empirical articles and reviews published from 2014- 2019. Study features to be coded regarding each relevant article were also selected. Then all Task Force members were randomly assigned a different subset of articles; two coders per article. The main task was to assess whether the recent empirical literature confirmed or disconfirmed the assertions made by the 2015 Task Force.

Procedures

LITERATURE SEARCH

The literature search was conducted using the following keywords with the operator “OR”, focusing on papers published since the 2015 Task Force in the window of January 1, 2014 to April 4, 2019.

- Violent video games
- Violence
- Violen*
- Aggressive behavior
- Aggression
- Aggress*
- Prosocial*
- Prosocial behavior
- Computer games
- Video*
- Game*
- Video games and media

This search resulted in 33,638 hits across the all of the following databases:

- PsychINFO
- Medline
- ScienceDirect
- Social Science Research Network
- ERIC
- Google Scholar
- ProQuest
- Wilson Social Science Index

The following six inclusion criteria used by the 2015 Task Force were applied to the sample:

1. study published in peer-reviewed academic journal
2. include at least one empirical analysis addressing video game violence separate from other types of media violence
3. include complete statistics
4. include at least one of the outcome variables considered in earlier violent video game meta-analyses
5. include some measurement of violent video game exposure
6. include description or assessment to determine that the violent video game is in fact violent

This resulted in 111 articles (including 3 meta-analyses) that were considered in the Task Force’s review of the literature. Note the number of articles included in the 2019 literature review is larger than the 68 articles included in the 2015 Task Force review, possibly because of a larger time frame (span of 63 months for the 2019 review vs 56 months for the 2015 review).

CODING

The 108 relevant papers were randomly divided among the Task Force members to assure there were two independent readers/coders per article so each coder was responsible for approximately 38 articles. There were an additional 3 meta-analyses that all members of the Task Force reviewed thoroughly but did not code. Special coding sheets were designed to record

- whether the study was relevant (did it test the association between violent video game exposure and aggressive outcomes?);
- was the association positive, negative, or null;
- what outcomes were collected and reported (e.g., observed aggression, self-reported aggression, aggressive affect, aggressive cognitions and positive outcomes such as prosocial behavior or empathy);
- was the study design correlational, longitudinal, or experimental;
- how well were gender, age, and socio-demographics represented in the study sample; and if represented did results vary according to any of these factors, and
- length of time between exposure to the gaming and measurement of outcomes.

Coders also could provide written comments about the relevance and validity of the results. Coders were given 3-4 weeks to submit their coding sheets.

RESULTS

In reviewing the collated coding sheets, there was some dissensus among the coders, which primarily stemmed from lack of detail provided in the original articles and ambiguity in the coding criteria. The Task Force members agreed that discussion of results for each

and every coding element for all 108 articles would be neither useful nor efficient. It is also worth noting that approximately a third of the articles was found by at least one of the coders to be irrelevant to the central question of the effects of violent video game exposure on aggressive outcomes. Many of these articles, for example, explored possible mediators or moderators of the effects (e.g., frustration, cooperative vs competitive play, race/gender of avatar) without including a control condition. However, the reading and coding of recent evidence of the individual studies and the three meta-analyses provided the Task Force members with extensive familiarity with the literature and consensus about one general conclusion and secondary observations.

The Task Force's general conclusion is that the bulk of recent evidence converges with the 2015 Task Force: There is a small and reliable relationship between violent video game exposure and aggressive outcomes. Although "outcomes" comprised a large range of variables, the reliability of the association between gaming and observed aggression—the most objective outcome—was seen as critical by the Task Force members. The fact that these associations were found in laboratory studies, longitudinal studies, and meta-analyses was also considered in the Task Force's conclusions.

Discussion about the 2015 Resolution on Violent Video Games

The Task Force deliberated on each statement of the resolution. Although the Task Force does not recommend revising the Whereas or Be It Resolved statements, it shares here some comments on those sections.

Whereas #3 reads "WHEREAS all existing quantitative reviews of the violent video game literature have found a direct association between violent video game use and aggressive outcomes;"

The Task Force discussed whether this statement was still accurate and if "all" should be changed to "most." At issue was the Ferguson 2015 meta-analysis which at first was interpreted as finding no support for the effects of violent video games on aggressive outcomes. However, upon closer examination, the effect sizes reported in Ferguson's 2015 meta-analysis are non-zero and were interpreted by the author as "minimal" but not null effects. Therefore, the group concluded that the use of "all" was still accurate.

Whereas #5 reads "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;"

The Task Force notes that this statement should be understood to pertain to the known risk factors examined within the literature rather than to all known risk factors. Relatively few known risk factors have been systematically studied in this literature.

Whereas #11 reads "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;"

The Task Force agreed that it is not possible at present to determine the magnitude of risk posed by violent video games relative to other factors that confer risk for aggression.

Be It Resolved #1 reads "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;"

The Task Force discussed this statement extensively. At best, what is meant by "these findings" is ambiguous and would benefit from a broader contextualization of the research literature on violent video games. This statement implies that the risk presented by violent video game exposure, vis-à-vis other risk factors for aggressive and even violent behavior, is known to be significant, but few studies have quantified such relative effects.

Be It Resolved #3 reads "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;"

Similarly, the Task Force discussed what the nature of such an intervention might be, based on the small effect sizes observed and the many other risk factors that affect aggressive outcomes. The group wrestled with whether or not the small effects observed in the research literature warrant the development and implementation of interventions when the relationship of violent video game play to violent behavior is unclear.

Conclusion

Despite these concerns related to individual statements of the 2015 resolution, the majority of the Task Force agreed that the more recent research does not substantively challenge the findings of the 2015 Task Force or the Resolution on Violent Video Games. The data continue to point to an effect that is consistent and, on average, small.

However, in the intervening years since the 2015 resolution, there have been multiple occasions in which members of the media or policymakers have cited the resolution as evidence that violent video games are THE cause of not only aggressive but also violent behavior, including mass shootings. The Task Force felt strongly that a statement to clarify how the resolution should be interpreted and used was necessary.

The Task Force is aware of the debate on the effects of violent video game exposure on aggressive outcomes and what those effects mean for real-life outcomes. It calls for civility and mutual respect in continued discourse on the topic.

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APPENDIX A

Resolution on Violent Video Games

*Adopted by the APA Council of Representatives in August 2015.
(Suggested citation is included with references.)*

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, Scharrow & 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 under-

standing 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.

SUGGESTED CITATION

American Psychological Association. (2015). *Resolution on Violent Video Games*. Retrieved from: <http://www.apa.org/about/policy/violent-video-games.aspx>

APPENDIX A

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