Videogame Violence and its Impact on Users

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Media: Image & Influence
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Introduction:

In today’s world of media and different forms of media entertainment, consumers in most democratic countries have many different choices about the media they want to consume. One form of media, video games, has continued to grow in popularity throughout the past few decades, and with this growth comes increased scrutiny. Video game consoles are present in over “41.1 percent of U.S. households” (Noyes, 2007, ¶ 2). “U.S. computer and video game software sales grew six percent in 2006 to $7.4 billion – almost tripling industry software sales since 1996”, and “the average game player is 33 years old and has been playing games for 12 years” (ESA, 2007). Video games are a popular media alternative for individuals and this is a growing industry that seeks to target a variety of ages. One particular genre of video games that has recently and increasingly been analyzed and evaluated is video games that feature violence. Many people feel this is an important topic due to the amount of children and adolescents who are growing up in a world surrounded by video games and other new types of technology. Video games have come under increased scrutiny in recent years due to tragic publicized events such as the high school shootings throughout the United States. The question we seek to answer using the knowledge of media literacy asks “is this scrutiny fair and do violent video games deserve to be labeled as a potential cause for increased violence among users?”

This report seeks to evaluate both sides of the argument concerning videogame violence and its impact on users, or players. By reviewing literature from both sides of this argument, we are able to see a more objective picture of videogame violence and what it exactly entails, as well as what perceived impact this has on users, and whether this is negative or positive, or a combination of both. Connections with media literacy are also made to show the importance of being able to critically evaluate media in today’s world.
Review of Related Literature:

Anderson and Bushman (2001) performed a meta-analytic review of video game research literature that suggests violent video games increase aggressive behavior in children and young adults (p. 353). “Analyses...reveal that exposure to violent video games increase physiological arousal and aggression-related thoughts and feelings” (p. 353). One of the interesting aspects of this study is that the authors attempt to define the terms associated with the study such as “violent media”, “aggression”, and “violence.” They also combine a lot of previous research on violent video games since this is a relative new area of study, as opposed to violence in television which has been studied for over five decades (p. 354). Anderson and Bushman (2001) point out that “violent media increase aggression by teaching observers how to aggress, by priming aggressive cognitions (including previously learned aggressive scripts and aggressive perceptual schemata), by increasing arousal, or by creating an aggressive affective state” (p. 355). After testing for aggressive behavior, prosocial behavior, aggressive cognition, aggressive affect, and physiological arousal, results of each test “clearly support the hypothesis that exposure to violent video games poses a public-health threat to children and youths, including college-age individuals” (p. 358). “Exposure is positively associated with heightened levels of aggression in young adults and children, in experimental and nonexperimetal designs, and in males and females” (p. 358). “Exposure is negatively associated with prosocial behavior...and positively related to the main mechanism underlying long-term effects on the development of aggressive personality – aggressive cognition...and positively linked to aggressive affect and physiological arousal” (p. 358). Anderson and Bushman suggest that this type of exposure to violent video games can likely have an affect on increased violence and aggression among game players by providing a causal link between the two variables.
Bijvank, Konijn, and Bushman (2007) point out that “several factors may increase media-related aggression in vulnerable populations” and “one such factor is identification with violent characters” (p. 1038). “The interactive features of video games encourage players to identify with violent characters” whereas “TV and film viewers simply watch violent characters” (p. 1039). “Video game players, however, must take the perspective of the violent character to play the game” (p. 1039). Bijvank et al. (2007) studied whether the playing of violent video games is more likely to increase aggression in adolescent boys who identify with violent characters than in adolescent boys who do not. Results of the study indicated that “participants who played a violent game were more aggressive than those who played a nonviolent game” (p. 1041). “In addition, sensation seeking was positively related to aggression, and higher levels of wishful identification tended to be positively related to aggression” (p. 1041). The researchers also pointed out that the most aggressive participants in the study were those who played a violent game and wished to be like the violent character in that game. As in Anderson and Bushman (2001), another causation link is made between violent video game playing and increased aggression and violent tendencies among game players.

Weber, Ritterfield, and Mathiak (2006) claim that “violent video games frequently have been criticized for enhancing aggressive reactions such as aggressive cognitions, aggressive effects, or aggressive behavior” (p. 40). Weber et al. used an event-related functional magnetic resonance imaging study to observe 13 male research participants while each participant played a violent video game. Weber et al. (2006) felt this type of research would give more sound evidence to a causal association of violent video games with increased aggression as opposed to previous meta-analytic reviews. Results of the study confirmed “involvement in virtual violence during video game play causes activity variation in the dorsal anterior cingulated cortex, reduced
activity in the rostral anterior cortex, and reduced activity in the amygdala” (p. 43). “Results indicate that virtual violence in video game playing results in those neural patterns that are considered characteristic for aggressive cognition and behavior” (p. 51). Weber et al. (2007) believe that the results of this study should give reason for concern, but they also are quick to realize that much more research should be given to this area if we expect to learn from media affects and the impact on users/participants.

Elizabeth Carll (2007), who chairs the Interactive Media Committee of the American Psychological Association’s Media Division, points out that “the American Psychological Association’s Resolution on Violence in Video Games and Interactive Media, passed in 2005, was based on a review of the comprehensive body of scientific research” (Carll, 2007). “Findings indicated that exposure to violent media increases aggressive behavior in children and youth”, and “this exposure increases feelings of hostility, thoughts about aggression, and suspicions about the motives of others, and demonstrates violence as a method to deal with conflict” (Carll, 2007). The authors argue that part of the power behind these types of games is that “violent video games enable the player to indentify with a violent character, which rehearses violent acts with much repetition” (Carll, 2007). When a user plays a video game they are not just observing, rather they are actively participating in the role-playing and outcome of the game itself. “According to learning theory, the more-realistic experiences provided by interactive media may be more conducive to learning aggressive behavior than passive forms like TV and film” (Carll, 2007). Carll also felt it was important to note that not all people who play violent video games will commit violence, “however for a subgroup of vulnerable individuals predisposed to violence and aggression, playing violent video games may provide opportunities to rehearse a recipe for action” (Carll, 2007). The interesting outcome of this study is the author
suggesting that certain vulnerable groups may be more susceptible to increased violence than other subgroups; however, no subgroups were named.

In the summer of 2005, Ran Wei conducted a study on 312 Chinese male and female adolescents and their responses to surveys after playing a game from a selected list of video games (Wei, 2007). This study was the first empirical study on the effects of violent video games on China’s 200 million adolescents. The study aimed to address two main concerns: “1) what are the attitudinal and behavioral effects of playing violent video games on Chinese adolescent Internet users? 2) Is there a gender difference in playing video games on the Internet in terms of playing time and exposure to videogame violence?” (p. 372). “Playing violent video games was found to be significantly related to greater tolerance of violence, lower emphatic attitude toward others, and a higher level of aggression” (p. 378). Additionally, all four hypotheses tested in the study were confirmed by the results: 1) “Chinese adolescents who have had a higher level of exposure to violence in video games will be more pro-violence” (p. 372) and 2) “Chinese adolescents who have had a higher level of exposure to videogame violence will be less concerned about others” (p. 372). 3) “Chinese adolescents who have had a higher level of exposure to video game violence will exhibit a higher level of aggressive behavior” (p. 373) and 4) “Chinese male adolescents will spend more time playing video games online and have a higher level of exposure to videogame violence than will female adolescents” (p. 373). As Rie points out, the results of this study certainly indicate a need for additional research concerning media violence and video games, and the impact on adolescents. Rie feels that more large-scale longitudinal studies could be useful to track the negative effects of violent video games as children and adolescents grow older and integrate into their society. This study, like others before, also suggest that video game violence causes negative effects for users.
In 2000, Gentile, Linder, Lynch, and Walsh (2004) performed a study to document the video game habits of adolescents and the level of parental monitoring of adolescent video game use, and the associations among violent video game exposure, hostility, arguments with teachers, school grades, and physical fights. Over 600 adolescents participated in the study and each participant completed an anonymous survey to document many different measures associated with video games. Upon reviewing the results, Gentile et al. (2004) confirmed that each hypothesis was supported by the results of the study. They found that “exposure to video game violence would be positively correlated with trait hostility” as well as “exposure to video game violence would be positively related to aggressive behaviors, such as arguments with teachers and physical fights” (p. 18). Perhaps the most interesting side note to this study came in a statement by the researchers, “that youth who are more hostile also play more violent video games raises questions of causality. Are young adolescents more hostile and aggressive because they expose themselves to media violence, or do previously hostile adolescents prefer violent media? Due to the correlational nature of this study, we cannot answer the question directly” (pg. 18). “It is possible that the people who are most affected by violent media are those who are most naturally aggressive, thus putting the most vulnerable at the greatest risk for increased aggression” (pg. 18). “Clearly, media violence is not the sole cause of aggression. But it is likely that it is one of several causes leading to it. Indeed, the American Psychological Association, the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the American Medical Association recently issued a joint statement that there is a ‘causal connection’ between media violence and aggressive behavior, but that it is complex effect. We [Gentile et al.] hypothesize that children with multiple risk factors for violence are more likely to exhibit aggressive behavior” (pg. 19). The important aspect of this
study is that the researchers point out that different adolescent organizations have indicated there is possibly a **causal connection** rather than strictly a **cause** between video game violence and violence among users/players. The researchers even state that “this study is limited by its correlational nature” and “inferences about causal direction should be viewed with caution” (pg. 20). This study was also one of the first to really address the fact that there are multiple factors and circumstances at work when we are talking about violence among video game users/players. Unlike previous studies where researchers simply looked at results at face value to make assumptions, Gentile et al. (2004) began asking serious questions about their results and whether violent video games are the only **cause** of violence among users/players.

Certainly not all literature points us toward negative aspects of video games. Douglas Rushkoff in his book *Playing the Future* (1999) wrote “while their parents may condemn Nintendo as mindless and masturbatory, kids who have mastered video gaming early on stand a better chance of exploiting the real but mediated interactivity that will make itself available to them by the time they hit techno-puberty in their teens”. The Media Awareness Network [MNet] highlights many benefits that can be drawn from video games. While noting some of the specific benefits for children, the Media Awareness Network indicated that video games “provide a fun and social form of entertainment” while also “encouraging teamwork and cooperation when played with others” (Video Games, 2007). MNet also believes that video games can “make kids feel comfortable with technology” and “increase children’s self-confidence and self-esteem as they master games” (Video Games, 2007). Video games are also suggested to possibly improve children’s skills in reading, math, and problem-solving, as well as help in improving hand-eye coordination and fine motor skills (Video Games, 2007). One could certainly argue for many of
these learning outcomes in various video games, but can this also apply to video games that feature violent content?

To answer this question let’s point to the fact that Many researchers believe that there are many positive learning outcomes that can be achieved through playing video games, and this also includes games that contain violence. Other researchers believe that reports stating “violence to be caused by video games” are bogus and they simply do not buy this as a valid argument. James Paul Gee, a professor at the University of Wisconsin at Madison, believes that some of the recent research pointing to negative effects caused by violent video games is false. “None of the current research even remotely suggests video games lead to real-life violence in any predictable way” (Gee, 2007). “As a good many people already know…there has been a pronounced decrease in violent crime since the earlier 1990’s, the very time when violent video games were introduced, e.g., Mortal Kombat, Doom, Quake. Even more to the point, if playing violent video games leads to a statistical increase in violence we should see a rise in violent crime, say, after QuakeCon each year, an event which draws thousands of gamers to play violent games. And the streets of L.A. should be awash with violence each year after E3 [another gaming event]. So far no one has found any such thing. On the other hand, some researchers have argued that video games have beneficial effects in regard to violence: for example, that teens use violent games as a way to manage feelings of anger or as an outlet for feelings of a lack of control” (Gee 2007; Gee 2005; Kestenbaum & Weinstein 1985). Gee’s work shows the importance of longitudinal cause-and-effect if researchers hope to prove causation between video game violence and increased violence among players. As Gee points out, so far there is no proof that this correlation exists and he sees this as a major flaw. Gee also suggests that violent video games have beneficial outcomes that should be examined.
“People have the idea that video games are somehow more potent than movies or books because the player does things in the virtual world via his or her avatar. In my view, the power of video games is not in operating an avatar per se. Rather, it is in situating one’s body and mind in a world from the perspective of the avatar. They [video games] are new tools for letting people understand from the inside out the worlds other people inhabit or worlds no one has yet seen” (Gee, 2005). Gee feels that this experience of learning from the perspective of others is valuable for us to understand other people and other perspectives in life. He also feels that the current narrow scope of video games [e.g. majority of games focusing solely on violence] is the big danger that we all face. “The danger exists if games show, or kids see, only one world, one world view, only one narrow type of game. Real intellectual and ethical growth comes from having been in many worlds, some of them different enough to get you thinking for yourself. So I would not ban games – ban worlds – but mandate lots and lots of them. Good video games are thinking tools. Their deepest pleasures are cognitive. We need to discuss the content of games – just as we do the content of books and movies – as a society. We need to ensure that there are lots of different worlds to offer” (Gee, 2005). Gee feels it is important for people, especially children, to get more of a global perspective from different games. With that being said, Gee still believes that violence is not caused by video games, and that positive learning outcomes can be obtained through video games being used as a tool to learn.

Karen Sternheimer feels that the media and politicians need to begin accurately reporting the facts instead of sending the public into a state of panic. Sternheimer points out that “in the ten years following Doom’s [a popular violent video game released in 1993] release, homicide arrest rates fell by 77 percent among juveniles. School shootings remain extremely rare; even during the 1990’s, when fear of school violence was high, students had less than a 7 in 10 million
chance of being killed at school” (Sternheimer, 2007, p. 13). Sternheimer believes that both the media and politicians look for something to “channel our blame and fear” after tragic events such as the school shootings in Springfield, Oregon and Littleton, Colorado (p. 13). “The public symbolically linked these rare and complex events to the shooters’ alleged interest in video games, finding them a catchall explanation for what seemed unexplainable – the white, middle-class school shooter” (p. 13). Sternheimer also notes that newspapers furthered the state of panic and “this helped to create a groundswell of fear that schools were no longer safe and that rampage shootings could happen wherever there were video games” (p. 14). Sternheimer feels that it is important to understand that there are too many factors at work to be able to make a strong correlation between media violence and effects. For this reason she also feels it is difficult to be able to generalize from a sample in a study to a general population due to various factors and circumstances at work for different individuals. “Focusing on extremely rare and perhaps unpredictable outbursts of violence by young people discourages the public from looking closely at more typical forms of violence against young people, which is usually perpetrated by adults” (p. 16). “If we want to understand why young people, particularly in middle-class or otherwise stable environments, become homicidal, we need to look beyond the games they play” (p. 17). Sternheimer discourages the media and public in placing blame on video games for causing violence and she feels that we need to look more closely at the reasons for certain people being violent and what measures we can take as a society to discourage violent acts.

When looking at media violence and video game violence as a cause for violence among children, as well as adults, David Buckingham (2000) is quick to disprove this type of reasoning. Buckingham believes that much of the research showing media violence as a main cause for
violence among consumers is false. “In much of the research, correlations between viewing and behavior continue to be seen as evidence of causality”, and “there is now a growing body of criticism and theoretical shortcomings of this research, and several reviews have demonstrated the weak and often contradictory nature of its findings” (Buckingham, 2000). Buckingham believes this type of research fails to prove its own hypothesis “that media violence makes people more aggressive than they would otherwise have been, or that it causes them to commit violent acts they would not otherwise have committed” (Buckingham, 2000). Buckingham feels that media violence may influence the form or style of acts of violence, “but it is not in itself sufficient cause to provoke them” (Buckingham, 2000). He also believes that media is often at times the scapegoat for blame after certain tragic events take place, such as the school shootings in U.S. schools. Obviously these are complex events that take place and video games as well as other media cannot be the only factor in any of these. Buckingham’s work lends us to look at other types of factors at work, and for us to get away from labeling media violence as a cause for violence. Buckingham sees blaming the media as a dangerous habit for politicians and other groups who are often trying to divert attention from other serious issues that should be addressed.

Albert Bandura is another researcher who believes that many factors are at work when discussing media effects. Bandura is a strong proponent of the social cognitive theory of mass communication. In this theory, Bandura explains psychosocial functioning in terms of triadic reciprocal causation:
As you can see from the diagram above, all three determinants interact with and involve one another. “In this model of reciprocal determinism, behavior; cognitive, biological, and other personal factors; and environmental events all operate as interacting determinants that influence each other bidirectionally” (Bandura, 1986). Personal determinants consist of “cognitive, biological, and other internal events that affect perceptions and actions” (Bandura, 1986). Behavioral determinants signify the “behavior” and the environmental determinants signify the “external environment” (Bandura, 1986). This model suggests that causal relationships are difficult to determine due to the unlimited amount of bidirectional relationships between the three factors or determinants. This theory also suggests that the relationship between violent video games and increased violent behavior may be weak due to the amount of factors and determinants at work. Rather than looking at the content of a video game as simply environmental determinants, we can assume that people are self-reflecting, self-regulating, and self-organizing as opposed to strictly reactive organisms. Bandura’s work suggests that many factors may influence someone’s behavior as a result of playing a violent video game, and it would be difficult to pinpoint only a few as a cause. The social cognitive theory dispels much of the research that suggests violent video games to be a cause for increased violent behavior among game players.
**Discussion:**

After reviewing numerous research reports and different articles and chapters related to this area of study, it is clear that additional research is needed. Many of the research reports that suggested violent video games to be a cause for increased violence among game users also suggested that more research was needed to validate results. A 2004 study that looked at factors correlated with violent video game use by adolescents stated that “a survey conducted at a single point in time can only demonstrate correlation, not causation” (Olson et al., 2007). Dill and Dill (1998) indicated that “precious few true experiments have been done to assess the effects of playing violent video games on aggression-related outcomes…the preponderance of the evidence from the existing literature suggests that exposure to video game violence increases aggressive behavior and other aggression-related phenomena. However the paucity of empirical data coupled with a variety of methodological problems and inconsistencies in these data, clearly demonstrate the need for additional research.” As stated previously, Buckingham (2000) also questions this type of research and the results when media is labeled as a cause rather than a contributory factor, especially since no actual statistical evidence even exists. Other reports called for longitudinal studies to study violence in video games and its impact on users over an extended period of time. Regardless of the type of study, it is clear that more research and more effort needs to be spent in this area of study before we make generalizations and other statements about how violence in video games affects game players.

**Connections to Media Literacy:**

Media literacy requires all of us to critically evaluate media content and to ask tough questions to find out answers about the media we consume. It enables each of us to be more
fully prepared in objectively evaluating and analyzing all different forms of media in hopes of becoming better citizens in a democratic society. Connections from this research about violent video games are important in understanding media literacy and how it influences our evaluation of media.

According to Considine and Haley (1999) one of the key principles of media literacy is that “audiences negotiate meaning”. While keeping this principle in mind when discussing violent video games and its impact on users, it is important for us to realize that we all have different opinions on what actually constitutes the word ‘violence’. Buckingham (2000) mentions that “rather than assuming that ‘violence’ is an objective category – which can then be measured by simply counting how frequently it occurs – we might begin by investigating what audiences themselves define as violent. Research suggests that there is significant variation here.” What is violent for you may not be violent for me, and so on and so forth. Therefore it is important to realize that each of us have different definitions of violence and violent content, and we all negotiate meaning of this in various ways.

Another principle of media literacy highlighted by Considine and Haley (1999) is that “media are constructions.” Violence in video games is only a construction, and we should not misplace video game content as being reality. Many of the reports that stated video game violence as a cause for violence pointed out that video game violence often tried to simulate reality, and therefore many game users often confused virtual reality for reality itself. Media literacy teaches us to not hold this belief of video game content as reality, rather as a construction. As advocates of media literacy, we try to teach society that media are constructions and we should not accept the representation of reality as reality itself.
Considine and Haley (1999) also point out that two of the main purposes of media literacy are protection and pleasure. If we can teach society to critically evaluate media content and media messages, people will gain a greater sense of protection from the media as well as a greater sense of pleasure from the media they consume. I feel the protection aspect of media literacy plays into both the consumer and the media itself. It is important for people to realize that media is not solely responsible for everything that happens in society, both good and bad. If we teach people to critically evaluate media for how it impacts our daily life and what it teaches us, I think we serve as a protector for our media because advocates of media literacy certainly do not want media to be blamed for certain situations. This also serves as a protector for the consumer as they pick up on skills they can use to dissect certain media messages and content. We also gain pleasure in our media by knowing its strengths and limitations, and how it affects our lives. We can then use this media in a way that is pleasurable for us because we know how it interacts with us and what we benefit in terms of personal enjoyment from the media we consume.

**Conclusion:**

Before doing this type of research without the knowledge of media literacy, I had often felt that violent programming on television and violent content in video games was a cause for increased violence. I have since learned to not hold these assumptions about media content and its effects. It is important to critically evaluate all arguments concerning the media when we have the opportunity to inform the public and more importantly, to sway public opinion. In today’s world of media image and influence, it seems that people are constantly looking for different forms of media to blame for society’s problems. As media studies educator Henry
Jenkins stated “when the Littleton shootings occurred, calls from the media increased dramatically. Suddenly, we are finding ourselves in a national witch-hunt to determine which form of popular culture is to blame for the mass murders, and video games seemed like a better candidate than most” (Jenkins, 1999). It is my hope that our society gets away from placing blame on the media. After reading some of the initial reports stating violent video games as a cause for increased aggression and violence among game players, it is clear that there are many researchers and agencies that believe video games have a significant role in violence. I certainly have my own personal thoughts about how the media plays a part in our society, but I do feel that I know more about how to critically analyze research associated with media effects, specifically in this case of violent video games and its impact on users. Hopefully as we move forward we can all learn more about how to incorporate media literacy ideals into every discussion associated with the media.
REFERENCES:


