

The Dark Side of Virtual Reality

The Problem: The use of violent video games pose a health threat to our children, our youth, and even to college age individuals¹. This paper is presented as part of my class work in Ethics in the Age of Technology. My goal is to draw attention to the prospective programmer and the future parent of the dangers of consistent and repetitive use of violent video games. I have concluded that violent video games have become the dark side of virtual reality. The effect on our youth is measured in heightened levels of aggression, a callous disregard to real life violence, and most alarming, a learned response tending toward violence when dealing with difficult situations.

Recommendation: I therefore recommend that we push our legislature to pass legislation to restrict violent video game sales, place stiff penalties on retailers that sell violent video games, and enforce new laws against the sales of violent video games of the type mentioned below. Furthermore, I recommend that the ACM adopt language that strongly discourages violent video game programming by its members. Lastly, I encourage parents to make every effort to monitor their children's use of video games and Internet content to avoid exposure to harmful content.

History

History of gaming: The video game industry is now 37 years old and is expected next year to become a \$55.6 billion industry. Last month, video game hardware and software sales in the US alone were \$1.1 billion. Video game profits have exceeded movie profits. The popular movie about virtual reality, "The Matrix" is now a video game, "The Matrix Online." Experienced programmers of games can make upwards of \$86,000 a year. The sophistication of the games has increased allowing the user to play other users, assign images (pictures) to victims, and control the environment to represent real locations. With graphic capabilities beyond 150 million polygons per second², the games are approaching motion picture clarity. It is easy to understand that interactive participation in this virtual reality video game world can be addictive. Now players can purchase virtual money with PayPal and buy and sell virtual goods at auctions. One game manufacture says you can pay your rent with what you earn in virtual income in his virtual reality world³.

¹ Craig A. Anderson, and Brad J. Bushman. 2001. Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. American Psychological Society 12:353-8

² Kevin Bonsor, "How Augmented Reality Will Work", <http://computer.howstuffworks.com/augmented-reality.htm>

³ "ENTROPIA UNIVERSE" <http://www.entropiauniverse.com>

Cyberspace Crime

Crime in Cyberspace: In 2005 the FBI Internet Crime Complaint Center IC3 processed more than 200,481 complaints of Internet crime submitted by law enforcement and regulatory agencies nationwide. These complaints were primarily for auction fraud (E-Bay), comprising 62.7% of complaints⁴. However, much more serious crimes are taking place where the perpetrator is assisted by the Internet. In one year according to the National Center for Missing & Exploited Children and the U.S. Department of Justice, 115 children were kidnapped, sexually exploited, killed, or held for ransom. Perpetrators frequently use chat rooms to lure a child into giving personal information which can lead to abduction. Although violent and ultra violent video games are currently not illegal, they can contribute and even promote violent and illegal activities by the player.

The Media and Violence

Media Violence: Violence, whether from car crashes that may result form a false sense of reality, homicides, or suicide, is the leading cause of death of our youth from ages 15 to 24 years; 3,500 youth are murdered each year. While 300,000 youth are victims of serious assaults, only 150,000 youth are arrested each year for violent acts.

Here are six facts about violence and media⁵:

1. The more you see violent media, the more likely you are to be violent according to researcher Craig Anderson of Iowa State University in Ames. He asserts that “brain studies ... showing that violent video games lead to increases in aggression.”
2. Virtual violence that is realistically displayed without pain to those involved, when expressed in a state of “good feeling” such as in a gang environment, is the type most likely to be emulated by the viewer.
3. The audience is increasingly accepting of violence as a solution to conflict.
4. The player is desensitized to the pain of the victim.
5. Violent media is a factor in half the homicides committed each year⁶.
6. The effects of violent media are cumulative, and the result is a learned behavior that shapes the individual’s personality. The cumulative effect is particularly true to youth at risk.

Driving Game: Virtual reality games may look like reality but it isn’t reality when it comes to driving. After deciding to write about this topic, I visited the video arcade in the MU. I subsequently observed two students interactively playing a Sega Rosso racing-

⁴ The National White Collar Crime Center and the Federal Bureau of Investigation, IC3 2005 Internet Crime Report, Department of Justice.

⁵ Michael Rich, MD, MPH, FAAP, “Violent Video Games Testimony”, American Academy of Pediatrics (Chicago City Council, October 30, 2000).

⁶ “Violent Video Games May Emotionally Arouse Players”, Radiological Society of North America (meeting in Chicago, November 28, 2006)

driving game. The road conditions were clearly dangerous, with light snow falling, and the roads appear icy. Yet, the simulation took on the unreal ability for each driver to stay on the road, control and maneuver each car even at very high speeds. While this game isn't violent, the outcome doesn't represent driving reality, either.

Car crashes remain the leading cause of death in teenagers in our country.⁷ Games like the Sega Rosso driving game give a false sense of reality about driving. Teenagers from ages from 16 to 19 are four times more likely to die in a car accident than drivers of ages 25 to 69 years. How many times have you thought, "The guy that just passed me is driving like he is playing an arcade game"? I have thought this lots of times. Is this driver more likely to drive more aggressively as a result of video games? Studies seem to indicate that this is true⁸.

Violent Interactive Media Games: Some interactive video games known as "First Shooter" games build an adrenaline rush in the player. The effect may be even greater for a more naturally aggressive child. The measured effect of heart rate and blood pressure is the same as a child has when he has been involved in a fight with another child. Seeking this rush appears to be addictive in some players. If a child is prone to aggression, then a violent video game builds more aggression. This result has been observed and measured in the brain activity of the players at the Indiana School of Medicine. The youth that played violent games showed more activity in the emotional arousal area as compared to other players of non-violent games. With non-violent games, not surprisingly, the players showed more activity in brain areas associated with inhibition, self-control, and concentration.

Massively multiplayer online role-playing game (MMORPG): This is a type of game in which many players interact within the game. In a raid game, 20 or more players may interact to defeat a boss. This can be viewed as collective violence. The Bosses halt game progression until a challenge is resolved. The player may take on a virtual identity which that person designs for himself or herself. So just how popular is this virtual person creation? In the virtual game Second Life, six million people have registered to create avatars. These are cartoon-like figures that respond to commands, and interact with other avatars.

Ultra Violent Video Games: My main focus is on video games that contain extreme violence such as "grand theft auto vice city Stories" and "grand theft auto Liberty City Stories." These games portray many scenarios of violence from hired hit men, drug running, and other crimes. These games are inappropriate for children because they increase aggression, desensitize children to real violence, the results are cumulative and lasting teaching of violence, and actually bring about anti-social behavior in youth⁹. The

⁷ Chelsea Phua, "Teen: Crashes are leading cause of death for youths," The Sacramento Bee, October 18, 2007, sec B, 2.

⁸ "Violent Video Games May Emotionally Arouse Players", Radiological Society of North America (meeting in Chicago, November 28, 2006)

⁹ Craig A. Anderson, and Brad J. Bushman. 2001. Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. American Psychological Society 12:353-8

child loses the ability to reason and take the benefit of doubt. For example, a push in line becomes a shove to the frequent player and a subsequent fight too frequently breaks out. Consequently, the frequent player sees the world as a more violent place than other children. Furthermore, the games have proven to be addictive. The aggressive behavior understandably breeds a bad attitude and the child has difficulty in school and subsequently in society due to the early behavior learned from violent video games. Interestingly, youth with low hostility levels become 10 times more likely to be involved in fights if they play lots of violent video games, according to David Walsh, Ph.D., of the National Institute on Media and the Family.¹⁰ We can only imagine how much more at risk the aggressive child is to be involved in violence.

Murder: In the early morning hours of June 7, 2003, in Fayettee Alabama, Devin Moore was being booked on a stolen auto charge. Moore had no prior record, but while being booked he sprang at the arresting officer, garbed his handgun, and shot him in the head, shot another officer in the hall in the head, and then ran around the corner and in the next room shot a 911 radio dispatcher in the head. Subsequently he fled in a patrol car for which he picked up the keys on exiting the police station. This all was within one minute and Officer Strickland, Officer Crump and dispatcher Ace Mealer were dead. On his apprehension, Moore said *“Life is like a video game. Everybody’s got to die sometime.”*¹¹

Lawyers partly blamed Moore’s actions on his repeated use of “Grand Theft Auto III” and “Grand Theft Auto: Vice City” where he shot police officers and stole cars in virtual reality. In just over an hour, the jury found Moore guilty of capital murder. He now could face the death penalty. With sales approaching \$2 billion, Officer Strickland’s brother and the dispatcher’s parents are suing the game manufacturer, Take-Two Interactive Software, Inc., Rockstar Games, Wal-Mart and GameStop stores in civil court. Furthermore, attorney Jack Thompson, a champion and activist against video game violence, says that “Moore was given a murder simulator;” the adults who created the games in effect programmed Devin Moore, assisted him in preparing for and carrying out three murders. These people should be held civilly responsible, too. Closer to home, an Oakland street gang is accused of robbing and killing six people after being provoked by a video game.

Solutions

Legislation: Several states are considering legislation that would ban the sale of violent video games to anyone under 17. But this isn’t enough. Consider the case of an 18-year-old Devin Moore who played Grand Theft Auto day and night for months. He would have had access to the game even with the new legislation.

¹⁰ David Walsh, Ph.D. “Video Game Violence and Public Policy”, National Institute of Media and the Family

¹¹ “Can A Video Game Lead To Murder?”, CBS NEWS, March 6, 2005.

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Ethics: Legislation clearly isn't enough. Besides, youth can play demo games at Fry's or purchase used games. Something is needed in the programming community to discourage violent video game production. Possibly stronger language in the ACM code of ethics would help, but what about foreign production; would foreign countries honor the ACM? No, the code must be internationally accepted. There must be an international code of computer programming ethics that strongly discourages the programming and production of violent video games that contain content that might be dangerous to the public, and in particular dangerous to children. Just because it isn't illegal to program this type of game, that doesn't make it acceptable, because this programming can lead to real life crime particularly to those youth at risk.

Parents: Programmers must be responsible and ethical but parents must be responsible, too. Parents must monitor and control the use of video games used by their children at home. Furthermore, they must instruct their children about the dangers of playing violent video games when visiting friends or playing games in a video arcade. It is most important for parents to be aware of their children's friends, their activities, the music they listen too, and the content of video games they play. The home of the child and the place of worship the child attends, are the most important places to teach the fundamental values of life, and keep a child from becoming at risk.

Immersion in ultra violent video media is a common factor, and ultra violent video games are frequently found in the homes of children who have become school shooters. Repetitive playing of ultra violent games allows the player to lower his heart rate, act coolly, all while performing real violent acts. Ultra violent video games are excellent tools for training killers. These popular games should be banned for sale to our youth, programmers ought to avoid these types of jobs, and parents must learn to protect their children from these threats.

WORD COUNT: 2072 words.