HEADSHOT!: AN EXPLORATION OF THE PHENOMENON OF VIOLENT VIDEO GAMES

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ABSTRACT

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This paper examines the phenomenon of violent video games. The work begins with a review of the violent content of American media entertainment. While violence in American media entertainment is pervasive, it is not as popular as commonly noted. Next, the paper discusses the video game industry and market. It appears that video games are not just played by adolescent boys as many believe. Although violent games do not make up the majority of the industry, they are indeed popular, as millions of violent games are sold each year in the United States alone. Concerns and critiques of violent video games are reviewed as well as research on the effects that violent games may have on those who play them. Utilizing existing theory and research on the consumption of violent media in general, the author considers the extent to which such theories are applicable to violent video games. While the theories used to explain why people consume violent media are indeed applicable to violent video games, certain aspects that violent games have such as control, active role of the user, and user identification, may make such games more appealing than violent television and film. Limitations of existing research are identified and discussed.

This thesis is dedicated to all those who enjoy playing violent video games and especially to those who I play with on a daily basis on XBOX Live. [OS] for life.

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CHAPTER 1: VIOLENCE IN AMERICAN MEDIA & ENTERTAINMENT

Violence in video games is currently a controversial issue (Weaver & Carter, 2006; Alloway & Gilbert, 1998; G4TV, 2005). Violent video games (VVGs) are not only on the minds of the players, but also, the minds of parents and policymakers as well. In the wake of school shootings such as Columbine, as well as scandals such as the "hot coffee" mod, which enabled players to access a mini sex game in *Grand Theft Auto: San Andreas*, VVGs have been placed in the spotlight. But what is this phenomenon regarding VVGs? The top two best-selling video games of 2004 were both violent games, and the popularity of these games continues to rise (Electronic Software Association, 2005; hereafter ESA). This paper will explore the phenomenon of VVGs. This paper will examine the content and popularity of violent media entertainment in general as well as specifically with regards to VVGs. It will also review literature with regards to concerns and critiques of VVGs as well as theories explaining the popularity of violent media forms. Rather than seek conclusive answers to this question, the goal of this paper is to provide a context for understanding the VVG phenomenon in America as well as to be a stepping-stone for future research.

U.S. computer and video game software sales reached $7.4 billion in 2006, almost tripling software sales since 1996 (ESA, 2007b). Of those software sales, 15% of the games were rated 'M,' meaning they should not be played by anyone under the age of seventeen (ESA, 2007a). The content and popularity of these games has caused concern for many people. These games, however, are not the only part of America's media entertainment that contains violence. In order to better understand the phenomenon that is VVGs, information regarding violence in other entertainment media forms is necessary. This information includes the amount of violence and popularity of that violence in other media entertainment forms in America. It also includes

comparing this information with that of other countries. This chapter will offer a brief overview that will give a context for better understanding the larger examination of VVGs in American culture.

The reason why humans are inclined to seek out media entertainment is because of leisure (Zillmann, 2000). Leisure, as defined by Shivers, is "a time of opportunity wherein the individual has the freedom to perceive and select experiences which are either worthwhile or simply gratifying" (as cited in Vorderer, 2000, p. 21). Leisure originated with the genus *Homo* more than 600,000 years ago (Zillmann, 2000). Leisure became available to humans as they were able to develop techniques that cut down on time spent on labor and defense. In order to fill these labor-free times, entertainment was developed. Over the course of time, the forms of this entertainment changed and evolved. Ancient entertainment examples include parties and festivals, gladiator competitions, and theatre performances. As we move into more modern times, theatre, opera, concerts, sports, and reading become mainstay leisure activities. This all changed with the development of technology. With the inventions of sound recording and transmission, as well as image recording and transmission, the world of leisure took a new turn (Zillmann, 2000). It no longer became necessary to leave the home to be entertained. As Zillmann (2000) writes, "radio and television, finally, converted every home to a concert hall, a movie theatre, and a sports arena" (p. 16). The diversity of what people can choose to be entertained by also evolved over time. People now have numerous choices of what they want to be entertained by, whether it is comedy, news, sports, or even violence. Entertainment media has given people an almost infinite number of ways to spend their leisure time (Zillmann, 2000).

Prevalence of Violence in American Media

In order to better understand violent media, it is necessary to discuss the amount of violent media in America. This includes research assessing the amount of violence in other countries as well so as to have something to compare with the research regarding America's violent media. Before reviewing the research, however, there are a few details that must be discussed. First, a definition of violence must be provided. The Cultural Indicators Project (CIP) has examined images in broadcast television since 1967 (Signorielli & Gerbner, 1995). For the purpose of this discussion, the definition used by the CIP will be used here. Signorielli & Gerbner (1995) define violence as, "the overt expression of physical force (with or without a weapon, against self or other) compelling action against one's will on pain of being hurt or killed or actually hurting or killing" (p. 280).

Next, the type of media being reviewed must be determined. All of the research that will be discussed in this section deals with television programming. The reason for this is to keep consistency when comparing statistics not only from year to year in America, but also, when comparing statistics with other countries. Finally, an overview of how the results of the research are presented needs to be detailed. Studies concerning violence in television media typically use the Violence Index (Signorielli & Gerbner, 1995). According to Signorielli & Gerbner (1995), "the Violence Index combines several violence-related measures" (p. 281). It is composed of three sets of observational data known as prevalence, rate, and role (Signorielli & Gerbner, 1995). Prevalence is the distribution of violence across a given sample. Rate is the frequency of violence within a given program of period of time (Signorielli & Gerbner, 1995). Rate may also be referred to as saturation (Smith, Wilson, Kunkel, Linz, Potter, Donnerstein, Blumenthal, &

Berry, 1998). Role is the portrayal of characters who commit violence or those who have violence committed against them (Signorielli & Gerbner, 1995).

The earliest research on violence in American television dates back to the 1950s (Gunter & Harrison, 1998). Smythe (1954) reported evidence from several studies concerning the amount of violence on seven New York City channels from 1952 and 1953. He found 3,421 acts and threats of violence, which averaged out to 6.2 violent incidents per hour. Smythe (1954) discovered that serious drama shows contained 87% of all violent portrayals, averaging ten incidents per hour. He also noted that children's programming had three times the frequency of violent acts than adult programming although the majority of these acts were found in cartoons, which averaged close to 37 incidents per hour. Remmers (1954) reported an increase in violent acts on television from 1952 to 1954. Violent acts nearly doubled from 1953 to 1954, going from 6.2 per hour to 11 per hour (Gunter & Harrison, 1998).

Some of the earliest long-term research on television violence in America comes from a study conducted by Gerbner & Gross (1976) encompassing the years 1967 through 1975. After nine years of research, they found that eight out of ten television programs contained some violence (Gerbner & Gross, 1976). This number rose to nine out of ten when specifically looking at weekend daytime programs, or what Gerbner & Gross called children's hours. The researchers found that by 1975, the overall rate of violent episodes was eight per hour. They also found that although the saturation of violence on children's programs declined from a 1969 high, it rested at 16 incidents per hour in 1975, double that of overall programming. Gerbner & Gross found that between six and seven out of every ten leading characters were involved in some violence, and this number became eight and nine out of every ten when looking at children's

hours. Between one and two out of every ten leading characters was involved in a killing (Gerbner & Gross, 1976).

This study was updated one year later when Gerbner, Gross, Eleey, Jackson-Beeck, Jeffries-Fox, and Signorielli (1977) added one more year of research to their findings making it a ten year study. The vital statistics to examine in this study are the changes from 1975 to 1976. Gerbner et al. found that 74.9% of all characters were involved in violence in 1976 as compared to 65% in 1975 (Gerbner et al., 1977). They also found that 89.1% of all the programs sampled contained violence as compared to 78.4% in 1975. The saturation of violence in programs rose to new records of 6.2 per play and 9.5 per hour as compared to 5.6 and 8.1, respectively in 1975. Gerbner et al. (1977) noted that the increase in violence happened across the board in all program types and times eliminating the possibility that the increase in violence was due to an increase in a particular type of program. The findings by Gerbner et al. are supported by research by Williams, Zabrek, and Lesley (1982) during a similar time period. Williams et al. (1982) sampled television programs in 1976, and found that there were 9 acts of physical aggression per hour, a half act difference from what Gerbner et al. found. Williams et al. (1982) also found higher levels of violence during children's programming hours similar to Gerbner et al. (1977).

Another study that sought to assess violence on television was the National Television Violence Study (NTVS). The NTVS was a three year study funded by the National Cable Television Association and involved the efforts of media scholars at four universities, an oversight Council of Representatives from national policy organizations, and project administration and coordination (Wilson, Kunkel, Linz, Potter, Donnerstein, Smith, Blumenthal, & Gray, 1997). The study took place between 1994 and 1997. In the first year of the study, the

researchers found violence in 58% of the shows analyzed. In the second year, they found violence in 61% of the shows (Wilson et al., 1997). Finally, in the third year, the researchers once again found violence in 61% of the shows sampled (Smith et al., 1998). They also found that there was an average of nearly 7 violent interactions per hour in 1998. Smith et al. (1998) concluded that the prevalence of violence on television did not significantly change over the three-year period. With regards to prevalence by channel, the research showed that basic cable channel's prevalence increased only slightly from 60% to 66% over the three years while broadcast channels increased from 47% to 51%. Violence in music videos increased 22% while violence in comedies and reality-based shows both increased 10%. The prevalence of violence during prime-time hours increased 8% over the three-year study (Smith et al., 1998). In the end, Smith et al. (1998) concluded that, "virtually all of our prevalence measures point to the conclusion that violence across the television landscape has remained remarkably stable over the three-year period" (p. 126).

Signorielli (2003) conducted a study that consisted of a sample of 13 weeks of prime-time programming broadcast between the years 1993 and 2001. She found that violence on television remained consistent during the nine-year span in that 60% of the programs each year contained some violence (Signorielli, 2003). The smallest percentage of programs containing violence was in the fall of 1995 (49%) while the largest percentage was in the fall of 1994 (77%). The number of violent actions also ranged from a low of 3.0 per program to a high of 8.2 per program (Signorielli, 2003). Signorielli (2003) found that while there were fewer acts of violence in the early 1990s, violence increased by 2001 to levels consistent with those in the 1970s and 1980s. Signorielli (2003) concluded that, "in short, for the past 30-plus years violence was found in 60% of prime-time network programs at a rate of 4.5 acts per program" (p. 54).

She claims that violence on television is a pervasive element and no matter what the context of the violence is, most viewers will encounter some violence while watching television (Signorielli, 2003).

Research indicates that American media entertainment contains a fairly high amount of violence. For example, Gerbner et al. (1977) found violence in 89.1% of the programs sampled and a rate of 9.5 violent acts per hour during the 1970s (Gerbner et al., 1977). The NTVS found violence in over 66% of the programs that study sampled and a rate of 7 violent acts per hour in the 1990s (Smith et al., 1998). Signorielli (2003) found violence in 60% of programs between the years 1993 and 2001, and concluded that violence in television has been consistent over the past 30 years. While the frequency and rate of violence has apparently decreased in recent years, the amount of violence is still high. The differences in the amounts of violence could come from a number of things including number of programs sampled, number of programs available, number of channels available, as well as other research differences. Nonetheless, the level of violence in each of the studies is over 50%, a level that both studies considered to be high (Gerbner et al., 1977; Smith et al., 1998; Signorielli, 2003). Before one can postulate on whether or not the high amount of violent media entertainment is strictly an American phenomenon; however, a comparison between America's violent entertainment media with that of other countries' is necessary.

Prevalence of Violence in Other Countries' Media

For the purposes of comparing America's violent media with other countries', the work done by Gunter and Harrison (1998) will be used. In conducting their research on violence in British television, Gunter and Harrison (1998) reviewed a number of other studies from various

countries in order to compare violence levels (Gunter & Harrison, 1998). The following discussion is largely based on their findings.

Bouwmann and Stappers (1984) analyzed television broadcasts in the Netherlands and reported less violence than American television (Gunter & Harrison, 1998). When using the Gerbner model of analysis, however, the Violence Index for Dutch crime programs is comparable to the United States. An Israeli study conducted in 1971, by Shinar et al. (1972) found violence on 48.4% of Hebrew adult programs, 30.4% of Arabic programs, and 21.1% of children's programs. In Australia, Stewart (1983) found that 51.3% of the programs sampled contained violence. McCann and Sheehan (1985) found that 51.3% of the programs sampled contained violence and 53% of the program hours coded contained violence. The saturation rate was 4.0 violent incidents per program, 5.4 per broadcast hour, and 7.4 per hour when non-fiction programs were excluded (Gunter & Harrison, 1998).

Iwao, de Sola Pool, and Hagiwara (1981) conducted a study comparing Japanese and American television (Gunter & Harrison, 1998). The study found that the number of violent incidents in Japan was slightly lower than in America, but this was due to the fact that Japanese programs were slightly shorter than American programs and the violent incidents were slightly longer. When assessing prevalence, 81% of the Japanese shows sampled contained violence, which is very close to the 81.9% observed by Gerbner et al. (1977) in American media. The study found that there were 14.3 violent acts per hour in cartoons and these acts lasted an average of 15.6 seconds. It was also found that Samurai dramas contained 8.7 violent acts per hour and these acts lasted an average of 32.3 seconds. It was also noted that in 54% of violent incidents occurring on Japanese-produced, non-cartoon programs, the actual wounding or killing was

portrayed onscreen. This occurred in only 24% of violent incidents of imported programs on Japanese television (Gunter & Harrison, 1998).

In 1988, the Asian Mass Communication Research and Information Center conducted a study of violence on television in eight countries (Gunter & Harrison, 1998). The eight countries were Bangladesh, India, Indonesia, Japan, Malaysia, Pakistan, Philippines, and Thailand. The main objectives of the study were to determine the frequency and level of violence on television in Asia, identify the types of violent programs, determine the countries of origin of those programs, explore the sources of locally produced violent programs, describe the dramatic contexts and the nature of violence, analyze the trends in the depictions of violence, and examine the cross-cultural similarities and differences in the depiction of violence on television. Four main categories of programming were selected for the study: social dramas, action adventures, cartoons, and comedies. A total of 256 programs were analyzed, with an average of 32 programs per country. More than half (56%) of the programs sampled were local in origin, meaning they were created in the country, and the majority of foreign programming came from the United States. Almost 60% of all programs sampled were classified as violent. The percentages of individual countries ranged from 18% in Bangladesh and 20% in Malaysia to 94% in Thailand and 100% in the Philippines. The percentage of violent programs in India, which had only local programs, was 72%. Only around one in four programs in the Philippines were local in origin (Gunter & Harrison, 1998).

There have been a number of studies conducted in New Zealand regarding violence on television (Gunter & Harrison, 1998). Ginpil (1976) found that there were 7.3 violent incidents per hour. Haines (1983) found that there were 6.09 violent incidents on TV1 in New Zealand and 5.30 incidents on TV2. Haines also noted that children's animated programs contained

26.14 violent acts per hour and westerns contained 24.85 per hour. Watson et al. (1991) found there to be 8.95 violent incidents per hour including threats and images, and 6.3 per hour when focusing on acts alone (Gunter & Harrison, 1998).

British researchers have conducted a number of studies on British television (Gunter & Harrison, 1998). Halloran and Croll (1972) found that 56% of programs coded contained violence and the rates of violence were 2.8 per program and 4.0 per hour. Shaw & Newell (1972) found that 63% of programs sampled contained violence and the rate of violence was 2.74 acts per hour. Cumberbatch, Lee, Hardy, and Jones (1987) found an overall rate of violence of 3.6 acts per hour. A series of studies by the Broadcasting Standards Council in Britain found rates of 2.9 violent acts in 1992, 4.0 in 1993, and 4.0 in 1994 (Gunter & Harrison, 1998). A more current study was done on violence in British television in 2002 (Coyne & Archer, 2004). The researchers examined 228 hours of television programming and found 4,209 acts of aggression, an average rate of 18.46 acts of aggression per hour. They found some form of aggression in 92% of the shows analyzed, 92% contained indirect aggression, 55% contained physical aggression, 86% contained verbal aggression, and only 3% contained no aggression at all (Coyne & Archer, 2004). When combining these statistics with the statistic that the average British adolescent watches 33.6 hours of television per week, Coyne and Archer (2004) determined that the average adolescent would witness 319 acts of aggression on television per week, ten times as many acts as one would witness in real life.

In comparing the saturation rates of various countries, Britain's rate is 4.0 violent acts per hour, Australia's rate is 5.4, New Zealand's is 5.7, Japan's is 7.0, and the United States' is 8.1 (Gunter & Harrison, 1998). While America's rate may be the highest, violent media entertainment is certainly not a uniquely American phenomenon. Most of the other countries for

which there is research had violence in over 50% of their programming (Gunter & Harrison, 1998). Even the countries that were importing programming, imported violent content, as seen in the case of the Philippines (Gunter & Harrison, 1998). It appears that violent media entertainment may be more of a global phenomenon rather than an American one. Now that the prevalence of violence in America's media entertainment has been established, as well as comparing that violence with other countries', an analysis of the popularity of this violence is needed. Violence in American media may be prevalent, but is it popular and why or why not is this the case?

Popularity of Media Violence

Most research claims that Americans do not prefer violent media, but rather, this type of media is simply saturating the market, making choices limited (Sparks & Sparks, 2000). Sparks and Sparks (2000) note, "some data suggests that the popularity of violence may be over-rated, perhaps due to the high profile that violent entertainment has occupied on the public and political agenda" (p. 86). Furthermore, George Gerbner notes that, "most of the highly rated programs on television are non-violent" (as cited in Sparks & Sparks, 2000, p. 86). Goldstein (1998b) concluded, "it is worth remembering that violent entertainment is the preferred form of entertainment only for a minority of the general audience" and that, "most viewers appear to prefer comedies and sitcoms to violent entertainment" (as cited in Sparks & Sparks, 2000, p. 87). If violent media is not the most popular type of media, why is it so prevalent in American media and why is this prevalence accepted?

One of the reasons why violence in media is so prevalent in America is because it is easily created (Sparks & Sparks, 2000). It is an economical tool used to liven up any boring plot.

Violence is also something that is universally understood, which means it can be exported very easily on an international level (Sparks & Sparks, 2000). It has been argued that Hollywood has an international audience in mind when producing films, which causes higher levels of violence than might be expected based on domestic profits (Sparks & Sparks, 2000). This is consistent with the comparison of the prevalence of violence in America's media to that of other countries. If violence in entertainment media is not preferred among Americans, then the next step is examining why Americans accept this violence.

It appears that violence in the media is socially accepted in America. There are a few reasons as to why this may be so. First, many Americans may feel that violent media is not a problem (Fowles, 1999). Researchers have been hard pressed to find any concrete evidence that violent media causes any real world problems such as violence and aggression (Fowles, 1999). Second, some research claims that television violence is a method of social control (Gerbner & Gross, 1976). Gerbner & Gross (1976) hypothesize:

> Symbolic violence is a demonstration of power and an instrument of social control serving, on the whole, to reinforce and preserve the existing social order, even if at an ever increasing price in terms of pervasive fear and mistrust and of selective aggressiveness. (p. 189)

They support their claim with research on relative victimization (Gerbner & Gross, 1976). In their research they found that old men, married men, lower class, foreign, and nonwhite males were most likely to be killed than kill during media portrayals of violence. They also found that young and old women, as well as unmarried, lower class, foreign, and nonwhite women were also most likely to be killed. Even more astonishing, the two found that old, poor, and black women were portrayed only as killed and never as killers. Finally, Gerbner & Gross (1976) found that "good" guys were most likely to be killers, while "good" women had no lethal powers. "Bad" women, however, were even more lethal than "bad" men. The two saw that

these patterns of portrayed victimization remained steady from year to year and noted that this, "demonstrates an invidious (but socially functional) sense of risk and power" (p. 191). To further support their claim, Gerbner & Gross (1976) surveyed a national sample of adults about their chances of being involved in real violence in any given week. They found that respondents overestimated their chances. This fell in line with a Detroit study in which respondents' estimations of danger in their neighborhoods had little to do with actual crime statistics or personal experiences (Gerbner & Gross, 1976). Gerbner & Gross (1976) concluded, "the pattern of our findings suggests that television and other media exposure may be as important as demographic and other experiential factors in explaining why people view the world as they do" (p. 193).

What Gerbner and Gross (1976) postulate is what Glassner (1999) calls a culture of fear. Glassner (1999) discusses why Americans fear the wrong things. Glassner (1999) takes on media violence and how it causes people to fear real world violence (Glassner, 1999). He uses Gerbner as a source in talking about people who watch enough television begin to believe their neighborhoods are unsafe, crime is on the rise, and their chances of being a victim of violence are high. Glassner (1999) points out that this is the case mostly among the nation's elderly. He notes that some studies have found that the elderly become isolated due to a fear of leaving their homes in part because of the portrayals of violence in the media (Glassner, 1999). This is consistent with Gerbner and Gross (1976) citing that the elderly are most likely to be portrayed as being killed. The elderly are afraid of becoming victims and this is compounded because by not leaving their homes, they watch more television, see more violent portrayals, and their fear increases (Glassner, 1999). This is how a culture of fear is created because, in actuality, Glassner (1999) points out, "people over sixty-five are less likely than any other age group to

become victims of violent crime—about sixteen times less likely than people under twenty-five" (p. 46). Glassner (1999) also notes that violent crime against senior citizens dropped 60% in the twenty years before 1994 (Glassner, 1999). Even with these statistical facts, the elderly continue to fear becoming victims in the outside world (Glassner, 1999). Gerbner & Gross' (1976) hypothesis that violent media is a form of social control appears to be a reality in that victim portrayals in media violence do cause fears of real world violence in people.

One final reason for why Americans may accept media violence is that violent media saturates the market, and many Americans may simply feel that there is nothing they can do about how much violence there is in the media and they accept it as inevitable (Fernandez-Villanueva, Dominguez-Bilbao, Revilla-Castro, & Anagnostou, 2006). Since it is the television stations that choose what is broadcast, many times people may not have enough non-violent alternatives to choose from. As aforementioned, television stations can produce violence easily and it can liven up any plot. "All this leads us to conclude that TV stations select programming that centers on the conflictive, dramatic, and therefore, violent aspects of reality to show to audiences" (Fernandez-Villanueva et al., 2006, p. 144). Those who are running the television stations are making the choices as to what people can and cannot watch and many people are simply letting them do this without question. When people take this stance, they become passive observers while the producers of violent media remain active in flooding the market. This leads to the "popularity" of violent media. As Sparks and Sparks (2000) conclude, "if a disproportionate number of available movies are violent and people want to watch something, then high quantities of violence will be consumed" (p. 87).

This introductory chapter discussed violence in American media entertainment. While it was seen that violence in America's media entertainment is high, it is not a uniquely American

phenomenon. Other countries besides the United States contain high levels of violence in their entertainment media. The next chapter of this paper will deal specifically with the video game industry and VVGs. What makes a video game violent? What is the popularity of these types of games? Are these violent games being played in other countries as well? These are all questions that the next chapter will attempt to find answers to.

CHAPTER 2: AN OVERVIEW OF THE VIDEO GAME INDUSTRY

Douglas Lowenstein, President of ESA, said, "the video game industry is entering a new era, an era where technology and creativity will fuse to produce some of the most stunning entertainment of the 21st Century" (ESA, 2007a). This stunning entertainment appears to be taking the market by storm as U.S. computer and video games sales reached 228.5 million units in 2005, for a total of $7 billion dollars in sales (ESA, 2007a). Danielle Parr, Executive Director of the Entertainment Software Association of Canada (ESAC) said, "not since their inception has there been a more exciting time in the video game industry" (Entertainment Software Association of Canada, 2007; hereafter ESAC). This chapter will focus on examining a number of details concerning the video game industry in America. First, a general overview of video game players will be provided. Second, this chapter reviews the content of video games. Next, this chapter discusses the popularity of video games, particularly VVGs. Finally, this chapter seeks to compare US statistics with those of other countries' video game industries. This overview of the video game industry will provide a context for later discussions about the relationship of VVGs to American culture.

Video Game Players

Before beginning a discussion of the video game industry and particularly VVGs, a definition of VVG is necessary. For the purposes of this paper, a VVG will be defined as a game that has received an M rating by the Entertainment Software Rating Board (ESRB). There are two reasons for doing this. First, the ESRB rates thousands of games per year and most retailers will not carry any video game that has not been rated by the ESRB (Entertainment Software Review Board, 2007a; hereafter ESRB). Second, while some people may argue that there are

violent games that do not have an M rating, the majority of games that both politicians and academics have concerns about are those that do carry the M rating (G4TV, 2005; Kirsh, 1998). It is for these reasons that a game given an M rating by the ESRB will be deemed a VVG in this paper.

When using the term video game, this paper is referring to both computer games as well as games that are played on home consoles. Much of the literature on video games distinguishes between computer and console games; however, for the sake of this discussion, the term video game will refer to both. Video games attract a wide range of players and purchasers in the United States. All data in this section was gathered by Ipsos-Insight during an annual study that was conducted for the ESA (ESA, 2007a). The study gathered data from almost 1,700 households that were identified as either owning a video game console, a personal computer, or both used for running entertainment software. While people may assume that this phenomenon is characteristic of young males, this is not the case. The average game player is 33 years of age (ESA, 2007a). Thirty-one percent of players are under the age of 18, 44% are between the ages of 18 and 49, and 25% are over the age of 50. The number of players over the age of 50 has increased 16% since 1999. Males make up 62% of the game-playing population and females make up 38%. Women age 18 or older represent 30% of the game-playing population while boys age 17 or younger only make up 23% of the gamer population. The average age of the most frequent game purchaser is 40. Ninety-three percent of people who make the actual purchase of computer games and 83% of those who make the actual purchase of video games are 18 years of age or older. The average number of years adult gamers have been playing is twelve. Sixty-nine percent of American heads of households play computer and video games. Forty-four percent of the most frequent gamers play games online, up from 19% in 2000. Fifty-eight

percent of online gamers are male and 42% are female. Thirty-two percent of heads of households play video games on wireless devices such as cell phones or PDAs, up from 20% in 2002 (ESA, 2007a). Thus, the popular image of video games as entertainment for only boys and male teens does not appear to be accurate.

Parents also play a huge role not only with their children who play video games, but as gamers themselves as well. According to the ESA (2007), eighty-nine percent of the time parents are present at the time games are purchased or rented and 87% of the time children receive their parents' permission before buying or renting a game. Sixty-one percent of parents believe that video games are a positive part of their children's lives. Thirty-five percent of American parents play computer and video games. The typical gamer parent is 37 years old and 47% of gamer parents are women. Gamer parents have been playing games for an average of 13 years, with one-third of those parents having played for 20 years or more. Among gamer parents, 80% report that they play video games with their children and 66% feel that playing video games with their children brings their family closer together. The top four reasons why parents play video games with their children are because they are asked to, because it is fun for the entire family, it is a good opportunity to socialize with their children, and it is a good opportunity to monitor the content of the games being played by their children (ESA, 2007a).

Video Game Content

For the discussion on video game content, information from the ESRB will be used. The ESRB is a non-profit, self-regulatory body that was created in 1994 by the ESA (ESRB, 2007a). The ESRB independently assigns computer and video game ratings, enforces industry-adopted policies and guidelines, and helps ensure responsible online privacy practices for the computer

and video game industry. It is not mandatory for games to be rated by the ESRB; however, virtually all games sold at retail stores in the United States and Canada are rated by the ESRB, and many retailers will not stock games unless they have been rated. The ESRB rates over 1,000 games per year. In 2006, 1,285 games were given a rating by the ESRB (ESRB, 2007a). In order to better understand the content of video games, a small discussion of how the ESRB rates games is necessary.

Each game that the ESRB rates is based on the consensus of at least three specifically trained raters (ESRB, 2007a). These raters are recruited from the New York metropolitan area, work on a part-time basis, typically have experience working with children, need not have advanced computer or video game skills, and are not permitted to have any connection with individuals who are associated with the video game industry. The raters do not have to have advanced skill in gaming because their job is to assess age appropriateness, not to assess game play. Raters are trained to consider a wide range of pertinent content before using their own personal judgment. Pertinent content refers to any content that accurately reflects both the most extreme content of the game as well as the game as a whole. Because interactivity is a unique feature of video games, raters also take into account items such as the reward system and player control (ESRB, 2007a). These are important characteristics for defining age-appropriateness because different games have different rewards and player control. Certain shooter games, such as *Ghost Recon Advanced Warfighter 2*, reward the gamer for the number of kills obtained, making higher levels of violence more rewarding. Other games, such as *Grand Theft Auto*, leave a lot of the game play up to the gamer, meaning the gamer can choose where to go, who to kill, and how to act. This leaves the amount of violence in the game play up to the gamer to some

degree. Both of these examples change the age-appropriateness for the games because of how interactivity affects the game play.

In order for a game to be rated by the ESRB, the game publisher must submit a detailed, written questionnaire as well as a videotape or DVD that captures all pertinent content to the ESRB (ESRB, 2007a). Once the ESRB checks the submission for completeness, the video footage is reviewed by the game raters who independently recommend an age appropriate rating along with content descriptors that describe specific content features of the game. When the raters are finished, ESRB staff members check to make sure there is a consensus in the different ratings, conduct a parity examination to ensure consistency in game ratings, and send an official rating assignment to the game publisher. The publisher can either accept the rating or change the content of the game and resubmit it to the ESRB. There is also an Appeals Board consisting of game publishers, retailers, and other professionals that publishers can take their game to if they disagree with the rating assigned (ESRB, 2007a).

According to the ESRB (2007a), their rating system was created, "after consulting a wide range of child development and academic experts, analyzing other systems and conducting nationwide research with parents" (Frequently Asked Questions section, para. 7). The ESRB found that parents wanted a system that contained age-based categories as well as objective and detailed information regarding the content of the game (ESRB, 2007a). Parents agreed that the system should inform and suggest, not prohibit, and that the rating should reflect the overall content of the game (ESRB, 2007a). The current rating system used by the ESRB was created with all of these details in mind. The current system contains seven age-based rating categories, each with its own definition (ESRB, 2007b). The ESRB also uses 32 different content descriptors to give players and parents information as to why games were given specific ratings.

Some of these descriptors include language, blood and gore, fantasy violence, use of alcohol, sexual themes, suggestive themes, and violence (ESRB, 2007b). Table 1 lists each rating, its definition, and a few examples of games that were given the rating.

Table 1: ESRB Ratings and Examples

RATING	DEFINITION	EXAMPLES
EC = Early Childhood	Titles rated EC have content that may be suitable for ages 3 and older. Contains no material that parents would find inappropriate.	Diego: Wolf Pup Rescue Sesame Street Dora's World Adventure
E = Everyone	Titles rated E have content that may be suitable for ages 6 and older. Titles in this category may contain minimal cartoon, fantasy or mild violence and/or infrequent use of mild language.	Final Fight Tecmo Bowl MLB 2K7
E 10+ = Everyone 10+	Titles rated E10+ have content that may be suitable for ages 10 and older. Titles in this category may contain more cartoon, fantasy or mild violence, mild language and/or minimal suggestive themes.	Super Contra Need for Speed Carbon Sonic the Hedgehog
T = Teen	Titles rated T have content that may be suitable for ages 13 and older. Titles in this category may contain violence, suggestive themes, crude humor, minimal blood, simulated gambling, and/or infrequent use of strong language.	Spider-Man 3 Texas Hold'Em Tom Clancy's Ghost Recon Advanced Warfighter 2
M = Mature 17+	Titles rated M have content that may be suitable for ages 17 and older. Titles in this category may contain intense violence, blood and gore, sexual content and/or strong language.	Gears of War Crackdown Blitz: The League
AO = Adults Only 18+	Titles rated AO have content that should only be played by persons 18 years and older. Titles in this category may include prolonged scenes of intense violence and/or graphic sexual content and nudity.	Lula 3D Critical Point Grand Theft Auto: San Andreas*
RP = Rating Pending	Titles listed as RP have been submitted to the ESRB and are awaiting final rating. This symbol appears only in advertising prior to a game's release.	

Source: ESRB, 2007b. *Game was rated M until "hot coffee" mod was discovered. Computer version of this game as well as console systems that were modified could unlock a mini game that contained graphic sexual content leading to the rating of this game being changed to AO.

In order to better understand the content of a video game that is given an M rating, a description of a couple of games that are rated M is appropriate. The first game that will be described is *Rainbow Six Vegas*. The game was published in 2006 by Ubisoft Entertainment, is a first-person shooter, and looks very realistic. The content descriptors on the back of the game that earned the M rating are blood, intense violence, strong language, and suggestive themes. In *Rainbow Six Vegas*, the player can play both offline and online. In the offline mode, the player takes control of the leader of a counterterrorist task force that is sent to prevent a group of terrorists from setting off a nuclear device on the Nevada Dam. The player can choose from a variety of weapons that include automatic rifles, shotguns, pistols, and sniper rifles. The player can also choose from a variety of secondary weapons and gadgets such as grenades, flashbangs, motion detectors, and GPS devices. All of the weapons and gadgets are recreations of weapons and gadgets used by actual counterterrorist task forces and terrorists. The player is also in control of two other team members. The player can give commands to these team members and have them execute certain tasks. Within the offline mode, the gamer must successfully navigate his way through the various levels, killing terrorists and completing objectives. There is blood present when kills are made and the terrorists often call out to the gamer using profane language. During some of the levels there are intense shootouts where the player must gun down a number of terrorists before being able to advance. While the offline game mode is violent, many gamers prefer the online game because of the interaction with other players.

In the online mode, the same weapons and gadgets are available to the players. Players can choose to play against the computer or against other players. Playing against the computer is very similar to playing in the offline mode except that instead of one player controlling himself as well as two team members, each player involved controls themselves as all the players work

cooperatively to complete the mission. When playing against other players, gamers can work as a team against another team or play in a free for all where it is every man for himself. In most of the game modes, the object of the game is to get the most kills whether it is on a team or by one's self. Players receive experience points when the match is over whether they win or lose; however, the team or player that wins receives more experience points. The game rewards those players who are able to kill the most and die the least. These experience points allow the player to gain ranks within the game, and with each rank gained, the player earns new armor, clothing, and weaponry. Other players can also see what rank each player in the game is and this gives players an idea of how long others have been playing as well as how good others might be. This is an example of a reward system within the game.

There are two things that make the online game of *Rainbow Six Vegas* interesting when it comes to violence. First, the game allows players to talk to each other through headsets. There is no control over what players say to each other except the option of muting individual players, and for this reason the ESRB advises that game play may change during online experience. Some players may use profane language, call other players names, and be vocally aggressive, increasing the amount of violence experienced by other gamers. The second thing that makes the game interesting with regards to violence deals with the X-Box camera. Players who own the camera can take a picture of their face and upload it into the game. When they play online, other gamers are actually seeing what they look like in real life. This enhances the violence because now players are shooting and being shot by "real" people.

The second VVG that will be described is *Grand Theft Auto* (GTA). The content descriptors on the back of the game giving it an M rating are blood and gore, violence, strong language, and strong sexual content. There are five games in the series and the series is

published by Rockstar. The graphics in the game are not as realistic as others but the people in the game do look very real. While the five games all have different stories, they are all similar in that they are third-person free roamers. This means that the player can choose either to play the missions in the game and advance in the story or the player can simply walk around and interact with the world as he chooses. The games take place in various cities and the lead characters tend to be nefarious. In the last three games, the main characters were a thief, a Mafia member, and an ex-gangbanger. The missions within GTA's stories almost always involve the player using violence in order to complete the objective. The player can use a number of weapons including his fists, melee weapons, pistols, shotguns, rifles, rocket launchers, and flamethrowers. The cut scenes within the games often use profane language and some include drug use as well as sexual content.

What makes GTA a very popular game as well as a violent one is the amount of control the player has in the game. The player can always choose to simply roam around the world even after the story has been completed. The game lets players make virtually every decision possible and this is where the amount of violence can be controlled by the player. When a player needs a car, he can either steal a parked car or hijack a car from another driver. When the player pulls the other driver from the car he can even kill that character if he chooses. Gamers can also choose to roam around the world killing everyone. While killing innocents does bring cops to arrest or kill the player, the player can also kill the cops. As more violence is committed, more cops show up, and eventually the FBI and even the army begin to appear, attempting to arrest or kill the player. The player can choose to continue his rampage until he is dead and respawns, attempt to flee and risk being dragged from a car and arrested, or enter a spray shop, where his

car will be repainted and the cops will not know who he is, making him free to continue doing whatever he wishes within the game.

One aspect of the game that received attention from critics is its inclusion of prostitution. When a player runs low on health, he can find a prostitute, park in a secluded place, and the car will make squeaking sounds while the player's health is regenerated. When the act is completed, the prostitute leaves the vehicle and the player's total amount of money goes down. While there is no visual image of the sex, the player can choose to exit the vehicle with the prostitute, kill her, take his money back, and still have replenished his health. This is the amount of control that players have within GTA and this control also adds to the amount of violence within the game.

While the ESRB rates the content of video games in America, foreign markets have video game rating systems as well. Japan's games are rated by the Computer Entertainment Rating Organization (CERO) (Dobson, 2006). The system has five ratings that are labeled A, B, C, D, and Z. The A rating is for games suitable for all ages. The B rating is for games suitable for ages 12 and up, C is for ages 15 and up, D is for ages 17 and up, and Z is for ages 18 and up. There are only 11 games that are rated Z in Japan and the majority of these games are Western-developed. Games that are rated M in the U.S. such as *Grand Theft Auto* and *Resident Evil*, are given Z ratings in Japan (Dobson, 2007). While the ESRB believes that the content of these games is suitable for ages 17 and older, CERO does not think that anyone under the age of 18 should be playing those games.

Australia also has its video games rated by an organization called the Office of Film and Literature Classification (Office of Film and Literature Classification, 2007; hereafter OFLC). The OFLC uses seven categories, labeled G, PG, M, MA 15+, R 18+, X 18+, and RC. G rated games are for general audiences. PG rated games are for general audiences but should not be

played by anyone under 15 without supervision. M rated games are suitable for ages 15 and up. MA 15+ rated games are not suitable for anyone under the age of 15 and this is legally restricted. The R 18+ rating is given to films that should not be viewed by anyone under 18 and the X 18+ rating is to films that should not be viewed by anyone at all. Items with an X 18+ rating can only be purchased in certain areas of Australia. The R 18+ and X 18+ ratings do not deal with video games in Australia because any game that would exceed an M 15+ rating is given a rating of RC, meaning it is refused classification (OFLC, 2007).

The number of games rated M or higher is not as high the media suggests (Ferris, 2005). In 2004, 54% of games published were rated E, 33% were rated T, and 12% were rated M (Ferris, 2005). Compare this to the 55% of movies that were rated R in 2004 and only 8% rated G (Ferris, 2005). The ESRB lists a total of 13,200 rated games on their website. Only 1,061 (8%), are rated M and only 23 are rated AO[1]. The rest of the games that have been rated by the ESRB are rated T or below with the vast majority (over 8,300), rated E (ESRB, 2007b)

Is the rating system effective? According to a 2006 survey, 83% of parents who play video games with their children are aware of the rating system and 74% of those parents say they check the rating of a game "every time" or "most of the time" when buying for their children (ESRB, 2007a). The survey also found that 53% of parents say they never allow their children to play M rated games. An additional 41% say they sometimes let their children play M rated games, but this is only after checking the rating information and judging whether the game may be appropriate. According to a 2005 survey, parents agreed with the ratings assigned by the ESRB 83% of the time, while 5% of the time parents found the ratings to be too strict. In another study, 53% of parents found the ESRB rating system to be "very useful" and 91% found

[1] ESRB website does not list rating specifics. The author had to search for each number of game titles with specific ratings and then add them all together to come up with these statistics.

the system to be either “very useful” or “somewhat useful” (ESRB, 2007a). It appears that the rating system developed by the ESRB is effective in assessing the content of a video game and assigning an age appropriate rating. It also appears that game publishers seem to be creating games that do not contain a large amount of violence. It is also important, however, to examine not only what kinds of games are being made, but also what kinds of games are being purchased.

In 2004, more than 248 million computer and video games were sold in America with a combined revenue of $7.3 billion dollars (ESA, 2005). The number of games bought in 2004 was almost ten million more then the number purchased in 2003. Of those 248 million, 83% of the games were rated either E or T while only 16% were rated M. A record twelve games sold more than one million copies in 2004, and nine of the twelve games were rated E or T. While the top two selling games of 2004 were both rated M, thirteen of the top twenty selling games of 2004 were rated E (ESA, 2005). In 2005, 228.5 million computer and video games were sold in America (ESA, 2007a). Of those 228.5 million, 49% were rated E, 4.0% were rated E10+, 32% were rated T, and 15% were rated M. The top 11 selling video games in 2005 were rated either E or T and only 4 out of the top 20 selling videos game were rated M. The top 11 selling computer games in 2005 were rated either E or T and only 3 out of the top 20 selling computer games were rated M (ESA, 2007a). It appears that VVGs are popular in America, and from 2004 to 2005, the sale of VVGs appears to remain consistent. They may not be as popular as E or T rated games, but 15% of the 228.5 million games sold in 2005 is still 34.3 million.

Comparison with Foreign Markets

Canada’s video game market is a lot smaller than the United States’ but also contains a number of similarities. In 2004, computer and video game sales reached roughly $587.5 million

dollars in Canada and that number fell to roughly $566.5 million in 2005 (ESAC, 2007). More than 70% of Canadian households own an entertainment device used to play computer or video games. The average game player in Canada is 33 years old. Thirty-one percent of players in Canada are under 18 years old, 44% are between the ages of 18 and 49, and 25% are 50 years old or older. Sixty-two percent of game players in Canada are male while 38% are female (ESAC, 2007). These numbers are very similar those in the United States. The sales of particular types of games are very similar as well.

In 2005, 56% of the games sold in Canada were rated E, 28% were rated T, and 15% were rated M (ESAC, 2007). The top 10 selling video games in 2005 were rated E or T and only 4 out of the top 20 selling games were rated M. The top 8 selling computer games in 2005 were rated E or T and only 4 out of the top 20 were rated M (ESAC, 2007). There thus appear to be striking similarities between the video game markets of the U.S. and Canada. Both markets share similar profiles of game players as well as similar types of games being bought in the markets.

The types of video games that are purchased in Japan are different than those purchased in the U.S. When looking at video game sales by genre in 2005, 4.7% of the games sold were fighting games, 8.7% were shooters, and 30.1% were dubbed action games (ESA, 2007a). These are the types of games that tend to receive ratings of T and M. In 2005 in Japan, the percentages of games sold in those same genre categories were very different than for the U.S. Only 2.8% were fighting games, 0.8% were shooters, and 27% were action (JETRO, 2007). It appears that VVGs are not as popular in Japan as they are in the U.S. and Canada.

In examining the video game industry in the U.S., a number of points have been made. First, the video game market encompasses a wide range of players. The myth that video games

are made for and played by young males is certainly false. The average game player is 33 years of age and 32% of gamers in the U.S. are females. The content of video games is also not as violent as people may think. In 2004, only 12% of video games made were deemed suitable for ages 17 and older. Eighty-seven percent of video games made in 2004 were rated either E or T, meaning they were deemed suitable for virtually everyone. However, while the number of VVGs being made may not be high, the number being sold is slightly different. It may appear that VVGs are not popular because only 15% of all games sold in 2005 were rated M, but that percentage translates to over 34 million M rated games being sold that year. VVGs may not be as popular as games rated lower but there are also not as many VVGs as there are games with lower ratings. This may skew how popular VVGs appear to be because games with low ratings are obviously going to sell more because there are simply more made. The production and sale of VVGs is not where the major issue lies, however. The effects that VVGs have on the players and society as a whole has caused concern in many people. The next chapter will explore the various concerns and critiques that have been raised against VVGs. These concerns and critiques have been raised not only by academics but by parents and politicians as well. The next chapter will also examine rebuttals to these concerns. Not everyone thinks that VVGs are detrimental to people and some researchers even claim that there are benefits from playing video games as a whole, which would include VVGs. This discussion of different people's attitudes towards VVGs is important in the overall exploration of VVGs in American culture.

CHAPTER 3: CONCERNS & CRITIQUES OF VIOLENT VIDEO GAMES

While the video game industry is a billion dollar industry that encompasses a wide range of players, produces and sales a large number of games, many of which are violent, it has come under public scrutiny with regards to that violence. In the wake of several school shootings committed by adolescent boys who were found to have played VVGs, these games have been the subject of scientific, public, and political attention (Kirsh, 2003). This chapter focuses solely on the concerns and critiques made by academic researchers. There are a number of studies that point to concerns about the exposure of VVGs. Many of these studies conclude that exposure to violence in video games leads to heightened aggression, anxiety, and potential for real violence (Gentile & Anderson, 2003; Kirsh, 2003; Anderson & Ford, 1986). What does research regarding VVGs say about the negative effects they are having on players and how are other researchers responding to these claims? These are questions this chapter will examine.

Research concerning the effects of VVGs tends to fall into one of two categories: the active media research school or the active user research school (Boyle & Hibberd, 2005). The active media research school is heavily influenced by North American psychological traditions and relies heavily on laboratory experiments, correlational, and self-reporting studies (Boyle & Hibberd, 2005). This type of research identifies any changes in behavior and argues that these changes are a result of the direct effects of the media type being analyzed. This category of research has created a number of theories to predict aggressive behavior including social learning, arousal, and cognitive priming theories. The studies in this school tend to claim that there is a direct link between video game violence and real world violence (Boyle & Hibberd, 2005).

The active user research school relies more on fieldwork such as ethnographical approaches (Boyle & Hibberd, 2005). This research tends to be done within a European context and focuses more on social and cultural factors that influence the formations of attitudes and behaviors in people, of which the media is one. This school of research tends to argue that violent content in video games cannot simply be read off as evidence that it causes real world violence. Researchers claim that the user of the media is engaging with the text in a more complex way than is often assumed (Boyle & Hibberd, 2005). The main weakness of this approach is the lack of original empirical studies (Boyle & Hibberd, 2005).

Literature Critical of VVGs

Empirical Research

Anderson & Ford (1986) conducted an experiment to determine the short-term effects of playing mildly and highly aggressive games. The researchers used 60 subjects total, 20 in each experimental condition (Anderson & Ford, 1986). The first experimental condition was playing a highly aggressive game, *Zaxxon*, for 20 minutes. The second experimental condition was playing a mildly aggressive game, *Centipede*, for 20 minutes. The final experimental condition was playing no video game (Anderson & Ford, 1986). No definition as to what made *Zaxxon* highly aggressive and *Centipede* mildly aggressive was given. The effect of playing or not playing the games was measured by having the subjects complete the Multiple Affect Adjective Checklist (Anderson & Ford, 1986). This checklist was developed by Zuckerman and colleagues and measures hostility, anxiety, and depression by having subjects simply circle either positive words or negative words based on how they feel at that exact moment. The subjects who played the games completed the checklist after playing, while the subjects who did not play completed

the checklist upon their arrival with the implication that they would be playing the games after they filled it out (Anderson & Ford, 1986). After examining their results, Anderson & Ford (1986) concluded that, "playing aggressive video games can have short-term negative effects on the game-player's emotional state" (p. 398). They further concluded that the amount of effect depended on the type of game (Anderson & Ford, 1986). They noted that the highly aggressive game increased both anxiety and hostility in players compared to the subjects who did not play, while the mildly aggressive game only increased hostility (Anderson & Ford, 1986).

Kirsh (1998) conducted a similar experiment involving 52 students in the 3rd and 4th grades. In the experiment, the children played one of two games for a total of 15 minutes (Kirsh, 1998). One of the games was considered violent and the other was considered nonviolent. The violent game was *Mortal Kombat II* (MK2) and the nonviolent game was *NBA Jam: TE*. MK2's content was changed from the original game. MK2 is rated M by Entertainment Software Review Board (ESRB) because of the amount of blood and gore in the game. The game, however, was rigged so that the subjects could only win or tie the round, and the blood, as well as fatalities, were removed from the game. This made the game appear similar to another game, *Street Fighter*, which also contains no blood and fatalities and is only rated T by the ESRB. The game was also rigged so that children played as characters that were the same gender and race as they were. During the game, players engaged in combat with both male and female opponents. *NBA Jam: TE* was rigged so that the subjects had an increased possibility that field goal attempts would be successful and the children always played as the same basketball team, the Chicago Bulls (Kirsh, 1998).

After the games were completed, the children were given six ambiguous provocation stories (Kirsh, 1998). In the stories, a same-sex peer caused a negative event to happen but the

intent of the peer was ambiguous. After each story, the children were given a total of six questions: two about the peer's intent, two about potential retaliation and punishment, and two about the peer's emotional state. The first question of each of the two question sets was always open-ended giving the child a chance to create his own answer. The second question was always closed-ended giving the child a limited number of possible answers to choose from. The responses were coded in terms of amount of negative and violent content. The results showed that the children who played the VVG responded more negatively about the intent of the peer when asked the first question, which was open-ended, but the second question, which was closed-ended, was not significant. The open-ended question of 'what would you do next' was answered more negatively by the children who played the violent game but the closed-ended question of 'do you think the kid should be punished,' was not significant. Finally, the children who played the violent game responded more negatively when answering the open-ended question about the peer's emotional state, but once again, the closed-ended question was not significant (Kirsh, 1998). Because the children playing the violent game responded more negatively on three of the six questions given, Kirsh (1998) concluded that, "the results of the present study offer some support for the contention that violent video games lead to the development of a short-term hostile attribution bias and subsequently seeing the world in a negative way" (p. 183).

Research has also been done concerning video game violence and gender. Eastin (2006) conducted a number of experiments in order to assess the gender effects on presence and aggressive thoughts with regards to VVGs. Eastin (2006) defines presence as, "feeling in one place when located in another" (p. 354). In all his experiments, Eastin (2006) used the game *Unreal Tournament: Game of the Year Edition* (UT). The UT editor was used to create a map

that all players would play on that had a large mirrored column located in the center so that players could see the gender of their character (Eastin, 2006). The game difficulty was the same for all players, all players viewed the same male and female characters, and weapon availability was also the same for all players. In the first experiment, 76 female participants were used. The participants were randomly assigned either a male or female avatar. An avatar is the character that the player is playing as. The players were told they would be playing against a computer opponent. The computer's avatar was also randomly chosen. The participants filled out a questionnaire before and after playing the game and only participants who could correctly identify their own character's gender as well as the gender of the computer avatar were included in the study (Eastin, 2006). Eastin (2006) found that when player and avatar gender matched, presence increased. It was also found that aggressive thoughts were highest when playing against a male opponent regardless of the player's avatar gender. Finally, when the player's avatar was a male and the opponent's avatar was female, aggressive thoughts were found to be relatively low (Eastin, 2006). Eastin (2006) posited that, "when playing with a male avatar, female players may conform to social values that inhibit aggression toward women" (p. 359).

In the second experiment, 75 female participants were used (Eastin, 2006). Everything from the first experiment remained the same except that a human opponent element was added. Once again, avatar genders were completely random for the players, the human opponent, and the computer opponent. Although some players were told they would be playing against a human opponent, all game play was against a computer. A female confederate was brought in to pose as an opponent. Eastin (2006) found that, similar to the first experiment, players with same-sex avatars experienced greater presence and more aggressive thoughts. The research also indicated that playing against a human opponent also increased aggressive thoughts regardless of

the player's avatar gender; however, when the player's avatar gender did not match their own, it appeared that the gender of the opponent played a greater role in aggressive thought. Similar to the first experiment, when a female player played as a male avatar against a female avatar, aggressive thoughts were relatively low; however, when a female played as a male avatar against the female, human opponent, aggressive thoughts were high (Eastin 2006). Eastin (2006) concluded that, "although same-sex representation appears to contribute to greater levels of presence and aggressive thoughts, opponent type influences appear to be more complicated and perhaps centered on the human attributes" (p. 363). What Eastin (2006) is saying is that the gender of the player's avatar may increase levels of presence and aggression but the gender of the opponent's avatar appears to cause more complex effects and seems to be affected by whether or not the opponent is actually a human or a computer.

In the final experiment, a male human opponent was also factored in (Eastin, 2006). For this experiment, 81 female participants were used. All the factors remained consistent with the first two experiments except that a male confederate was brought in to pose as an opponent for some of the female participants. Once again, even though the players were told their opponent was going to be a human, the players were always playing against a computer. All opponent avatars matched opponent gender. Eastin (2006) found that male opponents produced greater aggressive thoughts than female opponents. From Eastin's (2006) experiments it appears that gender representation affects not only presence but aggressive thought as well. It also appears that opponent gender representation affects aggressive thought too. This was seen in that the female participants experienced aggressive thoughts towards female opponents but those thoughts increased if the opponent was male (Eastin, 2006). The video game world has always been strongly male-focused, masculine, aggressive, and violent (Alloway & Gilbert, 1998). This

may explain why the female players had more aggressive thoughts when playing against male opponents. In playing in a world that is extremely male-oriented and male-dominated, perhaps the female players were attempting to prove that they could function just as well in that world as their male opponents could. It may also suggest that aggression is not an exclusively male domain.

Lachlan, Smith, and Tamborini (2005) examined the attributes of violent characters in popular video games. This assessment was based on Social Cognitive Theory (SCT) that suggests that people often imitate characters they see as attractive or similar to themselves (Lachlan, Smith, & Tamborini, 2005). To pursue their research, the interaction-level, unitizing framework, and operational definitions of the National Television Violence Study done by Wilson et al. (1997) were used. Lachlan et al. (2005) sampled the first ten minutes from 60 games from three different console systems. Violence was capture at the interaction level, defined as an aggressive exchange between a unique perpetrator and a unique target (Lachlan et al., 2005). A total of 1389 violent interactions were documented across the 600 minutes of game content, averaging 2.3 violent interactions per minute (Lachlan, et al., 2005).

When examining the types of characters that committed the violent interactions, Lachlan et al. (2005) found a number of things. First, the violent characters tended to be human, predominantly adults, white, and overwhelmingly male (Lachlan et al., 2005). Second, white male perpetrators' violent actions were seen as justified in about 75% of their actions. Finally, male characters were also more often seen committing acts of extreme violence (Lachlan et al., 2005). For Lachlan et al. (2005) this caused concern because, "in video games marketed to male adolescents in the United States, there are a large number of white, male perpetrators with whom young game players may perceive similarity" (p. 325).

Social Cognitive Theory argues that people imitate characters that they find attractive or find similar to themselves (Lachlan et al., 2005). The study by Lachlan et al. (2005) identified who might be at risk in terms of exposure to violence in video games and imitation. Their study found that white adult males are portrayed more often as violent characters in video games and therefore white adult males are at more risk of imitation (Lachlan et al., 2005). Recall that the average game player in the United States is 33 years of age, 69% of gamers are over the age of 18, and 62% of all gamers in the U.S. are male (ESA, 2007a). It appears that the majority of gamers in the United States fall into the category that Lachlan et al. (2005) have deemed at highest risk.

Lachlan et al. (2005) point out a number of limitations in their research. First, their work only assessed violence and violent characters in popular video games (Lachlan et al., 2005). They recognize that their data may already be out-dated, based on how fast the gaming industry evolves. Second, their experiment only considered the first ten minutes of game play. The frequency, context, and characters of violence may change as the game progresses. Many times players are only able to advance because of their interactions with more and more violent characters. Third, their experiment did not assess the impact of online gaming. The researchers hypothesize that the perception of competition and representations of avatars may make game play more realistic and this could impact the players in ways not known to researchers (Lachlan et al., 2005). Finally, Lachlan et al. (2005) mention that their samples were drawn from taped recordings of individuals playing the games and these individuals were relatively equal in gaming experience. They suggest that different gaming experience levels could have an impact on the amount of violent content, depending on the parameters of a game (Lachlan et al., 2005). More experienced players may be able to access more violent content if the game allows them to

do so. Additionally, the personalities of the game players may also have an impact on their interactivity with the game and its content (Lachlan et al., 2005). Because of this, Lachlan et al. (2005) advocate that future research should attempt to identify and control for these factors that may cause variation in game content.

Commentary

Gentile & Anderson (2003) argue that VVGs are the newest media violence hazard for children. Their definition of violence in a video game is when a player can harm another character in the game (Gentile & Anderson, 2003). Initially, the researchers point to three arguments regarding why VVGs may not have as much of an effect as violent television. First, the graphics on video games are not as realistic as they are on television. Second, many of the violent acts are not easily imitated, such as blowing up a spaceship. Finally, many of the violent acts are committed against characters that are non-human such as robots or aliens (Gentile & Anderson, 2003). Gentile & Anderson (2003) quickly point out, however, that these arguments become less relevant as video game graphics become more realistic and the violent acts are directed more against human characters. Furthermore, the authors point to six arguments why VVGs may have a greater effect than violent television (Gentile & Anderson, 2003).

The first argument is that identification with an aggressor leads to more likelihood of imitating that aggressor (Gentile & Anderson, 2003). They point out that it is difficult to predict which character a child will identify with on television and that the child may identify with victims, making it less likely that they would act aggressively after watching. Gentile & Anderson (2003) argue that in video games, one is required to take on the point of view of a particular character, forcing them to identify with this character. The researchers point out that

this is especially true in first-person shooters, where the player "sees" through the eyes of the character they play as. They also add that many games allow players to choose their character from a given set or even upload photographs of their faces onto their character, making the likelihood of imitating an aggressive act to increase (Gentile & Anderson, 2003).

Their second argument is that active participation increases learning (Gentile & Anderson, 2003). They point out that research shows that one learns more by actively participating in an activity than by simply watching it. While watching violent content on television is passive participation of violent acts, VVGs require active participation of violent acts and this increases the effect they have on children (Gentile & Anderson, 2003). This idea is supported by Jansz (2005) who argues that the interactivity of video games enhances the effects they have on the player versus simply watching a violent media type. Gentile & Anderson's (2003) third argument is that VVGs regularly require players to practice an entire violent act rather than only part of it, and this helps teach the necessary steps to successfully commit a violent act in real life. They point to evidence such as the U.S. Army using the game *Rainbow Six* in their training because the game is so good at teaching the necessary steps to plan and execute a special operation (Gentile & Anderson, 2003).

The fourth argument presented by Gentile & Anderson (2003) is that the violence in video games is continuous. They point out that the effects of violent television and movies are greater if the violence is continuous and unrelenting; however, they note that this is rarely the case in television and movies (Gentile & Anderson, 2003). By contrast, VVGs force the player to always be on alert for enemies and to constantly perform violent actions. Their fifth argument is that VVGs consistently require the player to perform the same violent acts over and over, increasing the odds that the child will learn from them. They argue that children rarely see the

same television shows over and over, but the repetition in VVGs is pervasive (Gentile & Anderson, 2003).

Gentile & Anderson's (2003) final argument is that rewards in VVGs increase imitation. They point to three processes that are involved with regards to rewards in VVGs. First, VVGs often reward aggressive behavior in some form such as points or extra lives (Gentile & Anderson, 2003). Second, rewarding aggressive and violent acts puts using violence in order to solve a conflict in a positive light. The games are teaching that using violence in particular situations is not only necessary but also all right. Finally, the reward pattern in video games increases the player's determination to continue to play the game. Knowing that there are rewards available may cause the player to persist at the game until all rewards have been received (Gentile & Anderson, 2003).

In addition, Gentile & Anderson (2003) point to five areas in which VVGs affect people. The first impact is that playing VVGs increases physiological arousal (Gentile & Anderson, 2003). The researchers point to studies that have shown that playing VVGs tends to show increases in heart rate as well as blood pressure. They also point to studies that have shown an increase in other chemicals such as dopamine and testosterone after playing VVGs. The second area Gentile & Anderson (2003) discuss is that playing VVGs increases aggressive cognitions. The researchers point to studies that have shown that aggressive thoughts increase after playing a game that is violent (Gentile & Anderson, 2003; see also Eastin, 2006). The third area discussed is that playing VVGs increases aggressive emotions. The two point to studies that show that playing VVGs leads to increased emotions such as frustration and anxiety (Gentile & Anderson, 2003; see also Kirsh, 1998). The fourth concern is that playing VVGs leads to increased aggressive behaviors. Gentile & Anderson (2003) point out that some studies have shown that

immediately after playing a VVG, both children and adults' behavior becomes more aggressive. This concern is further supported by Kirsh (1998) and his experiment regarding the short-term impact of VVGs on children. The final argument is that playing VVGs decreases prosocial behavior. The authors point to studies that show that children who played VVGs were rated by their peers as exhibiting fewer prosocial behaviors and more aggressive behaviors (Gentile & Anderson, 2003).

Literature Challenging VVG Critics

Empirical Research

Boyle and Hibberd (2005) reviewed literature pertaining to the impact of violent computer games on young people for the Stirling Media Research Institute. The researchers reviewed all key studies examining the relationship between VVGs and real world violence in young people between the years 1985 and 2004 (Boyle & Hibberd, 2005). Their primary methodological tool for reviewing the literature was an analysis of primary and secondary literature that focused on the supposed link between video game violence and real world violence. The authors found there to be a large amount of non-academic resources as well as academic resources and therefore divided the research between North American academic and non-academic material and European academic and non-academic material (Boyle & Hibberd, 2005).

There were a number of studies reviewed by Boyle and Hibberd (2005) that fell into the active media research school. Boyle and Hibberd (2005) point to a meta-analytic review of video game research literature by Anderson and Bushman (2001) as being one of the most important pieces of research published in recent years from the active media research school.

The research is based in the United States. Anderson and Bushman (2001) analyzed 35 research projects that sought to examine the effects of playing VVGs. After reviewing the projects, the authors concluded that high video game violence was associated with heightened aggression, exposure to VVGs is negatively correlated with prosocial behavior, VVGs may increase anger or hostility, and exposure to VVGs increased psychological arousal in participants (Boyle & Hibberd, 2005). Boyle and Hibberd (2005) also point to a number of studies that concur with the finding of Anderson and Bushman (2001). They also point to a number of criticisms that have been made of the review. Bensley and Van Eenwyk (2001) argue that the research focuses on VVGs affecting young children and that it is not possible from current research to determine the effects that VVGs have on adolescents (Boyle & Hibberd, 2005). Freedman (2001) also criticized the research, claiming that research of that type compares VVGs to non-violent games and the arousal that is caused may simply be because the non-violent games are less exciting (Boyle & Hibberd, 2005). Freedman (2001) also argues that in that research, there is a desired result and the design of the experiment could possibly influence how the participants react (Boyle & Hibberd, 2005).

Another study that was reviewed by Boyle and Hibberd (2005) from the active media research school was by Grossman and DeGaetano (1999). Grossman and DeGaetano (1999) used crime statistics to show a correlational link between the rise of video game violence and the rise in juvenile assaults (Boyle & Hibberd, 2005). The two claim that video game violence desensitizes players by repeatedly exposing them to violent images. This desensitization makes it easier for youths to commit violent acts because of how they feel towards violence. Millwood Hargrave (2003) points out that the desensitization theory fails to take into account the argument that youths can distinguish between different acts of violence (Boyle & Hibberd, 2005). Smith

(2000) also argues against the claims of Grossman and DeGaetano (1999) by showing that the prediction that the researchers made about a rise in juvenile crime has not happened (Boyle & Hibberd, 2005). Furthermore, Bensley and Van Eenwyk (2001) found that crime statistics suggest the exact opposite of Grossman and DeGaetano's (1999) findings (Boyle & Hibberd, 2005; see also Ferris, 2005).

Boyle and Hibberd (2005) mention that the psychological research that was reviewed fails to take into account the work that has been done on media violence in the social sciences. They also note that the research begins with the assumption that there is a direct link between media violence and violence in society (Boyle & Hibberd, 2005). Boyle and Hibberd (2005) point to the fact that some studies, Bavelier and Green (2003), have argued that there are positive benefits to media violence, such as video games having a cathartic effect on players that actually reduces aggression.

Upon reviewing research from the active user tradition, Boyle and Hibberd (2005) point to a book by Jones (2002) as being extremely important. Jones (2002) argues that VVGs can help children in contemporary societies and that the games even have positive effects such as conquering fears and creating a sense of identity (Boyle & Hibberd, 2005). Another body of work that Boyle and Hibberd (2005) point to is an ongoing study being conducted by Dr. Jon Sykes and Professor Robert Winston. The two researchers are currently producing a television series entitled *Child of Our Time* that traces the development of a number of children born in 2000 over the first twenty years of their lives (Boyle & Hibberd, 2005). In one episode, the focus is on the impact of media on the lives of the children. There was particular interest in a four-year-old child, Ethan, who played the VVG *Halo*. The research done by Sykes and Winston showed that Ethan's arousal levels significantly increased during his game play, which led to

small problems such as not being able to get settled for bed after playing. It was also shown, however, that playing the game did not make Ethan aggressive or violent towards the other children he interacted with at his nursery. Ethan was a popular child at his nursery and interacted well with his peers. The research was also able to show that the game actually heightened Ethan's decision-making ability. When Ethan played against Professor Winston, he was even reluctant to shoot his opponent (Boyle & Hibberd, 2005).

The first longitudinal study with regards to VVGs and aggression was done by Williams & Skoric (2005). Before engaging in their study, the researchers noted a few things about prior research. First, prior research over-relies on the use of children in experiments (Williams & Skoric, 2005). Williams & Skoric (2005) point out that gamers under the age of 18 only make up 42% of console players and only 28% of computer players. The two also point out that game research has solely been based on either laboratory or observational field experiments (Williams & Skoric, 2005). Just as Buerger (2006) notes, William & Skoric (2005) argue that this causes the duration of the research to be too short, unduly artificial, and lacking a social context. They point to the last element being especially crucial because 60% of gamers now play with friends and 25% play with a spouse or parent (Williams & Skoric, 2005). Finally, Williams & Skoric (2005) state that there is an issue with prior research and the generalization of game content. They claim that researchers have lumped games together that are not equal and this skews results. They compare it to combining the movies *The Little Mermaid* with *Pulp Fiction* and expecting the combined viewing to be a predictor of aggressive behavior (Williams & Skoric, 2005). It is for these reasons that Williams & Skoric (2005) embarked on their longitudinal study.

Williams & Skoric (2005) chose the game *Asheron's Call 2* (AC2). AC2 is a fantasy-based game and was chosen for the experiment because of its accessibility, level of violence, game goals, level of interaction with other players, and representations (Williams & Skoric, 2005). In the game, players play online with others; however, the conflict in the game is almost never between players. Instead, players cooperate with one another to defeat an assortment of monsters. There are a few places where players can battle each other, but these are rare (Williams & Skoric, 2005). Compared to other games, Williams & Skoric (2005) point out that AC2 is highly violent. Participants in the experiment were selected randomly and placed in one of two groups: the treatment group that received the game and the control group that did not (Williams & Skoric, 2005). Participants who were in the treatment group were mailed the game as well as a diary to record their playing time. The game play lasted for one month and the mean number of hours played by the participants was 56. Self-reported questionnaires were completed by both groups before and after the game play session. A total of 213 participants completed both sets of questionnaires, 75 in the treatment group and 138 in the control group. Aggression was measured using the Normative Beliefs in Aggression (NOBAGS) general scale. The NOBAGS scale has been used to measure short-term affects of television and video game violence as well as long-term affects of social interventions. The scale ranges from 8 to 32 with higher numbers indicating higher normative beliefs concerning the acceptability of aggression (Williams & Skoric, 2005).

The results of the experiment indicated a couple of things. First, Williams & Skoric (2005) found that there were no strong effects associated with aggression caused by the game. They point out that while their analysis was incapable of detecting very small effects, there were no moderate or large effects upon the treatment group (Williams & Skoric, 2005). Second, the

results challenge the contention that some VVGs lead to increased real-world violence. Williams & Skoric (2005) mention that the concern that has been raised after events such as Columbine may be more epiphenomenally, than globally, warranted. Williams & Skoric's (2005) longitudinal study is the first of its kind and it suggests that VVGs do not have an effect on aggressive behavior as other researchers suggest.

Commentary

Olson (2004) points out that it is "an American tradition to blame the corruption of youth on violent mass media, from the lurid 'half-dime' novels of the 19th century to 1930s gangster films and 1950s horror/crime comics" (p. 144). She notes that VVGs appear to be the most recent medium to be blamed by researchers, politicians, and popular press for society's ills (Olson, 2004). Olson (2004) discusses a number of issues with regards to research claiming that VVGs are causing problems within society. First, Olson (2004) points to some commentators using the terms aggression and violence almost interchangeably as if one ultimately leads to the other. She says that researchers link aggressive thoughts, feelings, and behaviors to real-world violence and they assume that reducing these factors will reduce harm (Olson, 2004). According to Olson (2004), these confusing terminologies, as well as these assumptions, undermine the credibility of studies. She indicates that people who listen to whining toddlers in restaurants also have aggressive thoughts and feelings, but these are a far cry from actual child abuse (Olson, 2004).

Another issue for Olson (2004) is that the use of violent media is not put into context with other factors associated with aggression and violence. The strongest predicators of childhood violence are involvement in crime, male gender, illegal substance use, physical

aggressiveness, family poverty, and antisocial parents (Olson, 2004). Much of the research arguing that violence in video games causes aggression does not factor in these other variables. This issue is also raised by those who contend that VVGs do cause an increase in violence and aggression (Kirsh, 1998; Gentile & Anderson, 2003). Olson (2004) also states that most children who engage in aggressive behavior do not grow up to be violent adolescents or adults, and most violent adolescents were not notably aggressive children. A third issue discussed is that test conditions are difficult to translate to the real world (Olson, 2004). For Olson (2004), experimental conditions are artificial and actually turn game play into game work. Most experiments are for short periods of time in which the player cannot truly get into the game, and there is only a single game exposure, which cannot represent the effects of playing numerous games in real life (Olson, 2004). On top of this, most experiments isolate the participants, forcing them to play alone, when virtually all children play video games with others (Olson, 2004). This concern was also raised by Williams & Skoric (2005), which led them to pursue the first longitudinal study regarding violence in video games. This has caused the effects of the social context of video games to go unnoticed in most research and this social context may be the most important thing to examine when discussing the effects of VVGs (Olson, 2004).

Another problem is the broad generalization of results (Olson, 2004). It is not uncommon for researchers to recruit college students for their experimental studies on VVGs; however, these students differ from the typical American teen population that is of greatest interest to scientists and policymakers. Other studies use samples that are too narrow in age or geography. Many studies also do not consider other possible explanations. They claim that VVGs cause aggression and violence but do not examine the possibility that violent people may seek out violent games in order to take out their aggression. Additionally, moderating variables are not

taken into account in the research. These variables include age, context of violence, gender, socioeconomic status, and other factors that could also play into an individual's aggression level (Olson, 2004; see also Gentile & Anderson, 2003; Kirsh, 1998).

According to Olson (2004), the current research community is sharply divided on whether or not VVGs cause actual harm. She points out that several well-regarded reviews have concluded that researchers have been unable to support the argument that video game violence leads to real world violence (Olson, 2004). In 2001, the Surgeon General noted that there is evidence for a small to moderate short-term increase in aggression; however, Olson (2004) notes that the sum of findings suggests that there is a relatively small impact on violence or that the impact still needs to be determined.

Buerger (2006) points out that the United States Surgeon General, the Federal Trade Commission, and the Federal Communications Commission have all noted the lack of consensus among the research community concerning the effects that violence in video games has on players. She also notes that even researchers who frequently point to violence as being a problem constantly acknowledge a difficulty in establishing a causal link (Buerger, 2006). As an example, Buerger (2006) points to a 2005 review done by the American Psychological Association (APA) in which more than a dozen studies concerning violence in video games were reviewed. The APA concluded that there was no clear consensus concerning the potential harm resulting from children playing VVGs (Buerger, 2006). One of the biggest problems that Buerger (2006) points to in the research is the lack of longitudinal studies. Prior research has been criticized as too short, unduly artificial, not representing the social context of game play, and overly reliant on younger test subjects (Buerger, 2006).

In reviewing the research in the active user tradition, Boyle and Hibberd (2005) found very different results from those in the active media tradition. They point out that playing a game in isolation may cause an increase in arousal levels but this may only be short-term and cannot be read as a precursor to violent behavior, which is what most research in the active media tradition coming from North America concludes (Boyle & Hibberd, 2005). Boyle and Hibberd (2005) argue that the weakness in this approach is that the experiments are based in laboratories and not in the real world itself. When experiments are carried out, many times the participants are students and not actual gamers (Boyle & Hibberd, 2005). Researchers in this school tend not to ask how or why people play video games, but rather, simply review raw data and make claims about the relationship between video game violence and real world violence (Boyle & Hibberd, 2005). They also point out that the research done in the active media tradition does not include other factors such as social, familial, and peer environments that also influence the attitudes and behaviors of children. A 2005 review by Browne and Hamilton-Giachritsis from the Centre for Forensic and Family Psychology dealt with this issue. The study reviewed six North American studies, four of which were specifically about video game violence, and concluded that there is a small but significant association between media violence and its influence on children and adults. The study noted, however, that there were a number of flaws in these studies, including shaping aggression, the methodological challenges of carrying out such research, and inconsistent evidence. The study ended by calling for future research including large population samples in order to better determine the link between media violence and violent crime behavior (Boyle & Hibberd, 2005).

After their review of the literature, Boyle and Hibberd (2005) drew a couple of conclusions. First, they concluded that there are many inconsistencies with regards to research

concerning media violence (Boyle & Hibberd, 2005). They argue that there are a number of myths, misinterpretations, and misrepresentations with regards to the quality and quantity of research on this issue. This has led some researchers to call for more research, especially on recent and more realistic games (Boyle & Hibberd, 2005). The second conclusion made by Boyle and Hibberd (2005) is that despite the rise in interest in this topic, the amount of research done has not kept pace with the video game industry. They point out that the majority of research done in the United States comes out of psychology and that much of the research in the UK has been influenced by the U.S. For them, this hinders the research done in the UK because the research in North America continually assumes that there is some link between media violence and violent behavior (Boyle & Hibberd, 2005). Finally, Boyle and Hibberd (2005) conclude:

> Many of the concerns about the impact of video games on young people are actually symptomatic of deeper social concerns about the changing nature of childhood in the modern world and the perceived increase in the elements of risk to which young people are exposed in society. As long as these concerns exist, areas of popular cultural activity such as computer games culture will be the subject of ongoing debate about its wider social impact on patterns of behavior. (p. 37)

Limitations and Future Research

The research that has been done concerning the relationship between video game violence and real world violence is not without limitations. Those who are conducting the research are aware of these limitations and discuss what needs to be done in future research. One of the biggest limitations in this field of study is the lack of moderator effects assessment (Williams & Skoric, 2005; Kirsh, 2003; Gentile & Anderson, 2003). Moderator effects are other factors that are associated with aggression, such as sex, age, family, etc. (Kirsh, 2003). Research

on television violence has shown that when these factors are included with exposure to violent television, such as lack of parenting, the risk of increased aggression rises (Kirsh, 2003). In order to test for moderator effects, a large sample size is needed and this has not yet been done with regard to VVGs (Gentile & Anderson, 2003). Boyle and Hibberd (2005) also imply a need for new research questions that look at moderator effects. These questions include examining whether or not a combination of different types of games, types of personalities, and types of situations might have adverse effects on players. They mention that doing this will require substantial funding of future research as well as assistance from game manufacturers (Boyle & Hibberd, 2005). While this may be difficult to do, Boyle & Hibberd (2005) note that succeeding in this area will allow research to explore recently published games and hopefully catch up to a world that is rapidly improving and evolving. Olson (2004) calls for asking similar questions. While it is very difficult to determine whether or not playing a violent video game will lead to serious crimes such as murder or assault, she believes that researchers may be able to study how VVGs affect everyday behaviors (Olson, 2004). For example, will heavy players of VVGs resort to violence as their first course of action, see violence as easily justifiable, feel less empathy for others, or interpret accidental mishaps (bumping into someone) as purposeful and hostile (Olson, 2004).

Gentile and Anderson (2003) discuss six limitations to the research that has been done thus far on VVGs. First, sample sizes have been too small. When this happens, results tend to be thrown together in meta-analyses, and this is one of the reasons why studies concerning video game violence have yielded consistent results (Gentile & Anderson, 2003; see also Williams & Skoric, 2005). Second, some studies that have been done do not use violent and nonviolent games that are different enough in content. Third, some studies have used a nonviolent game as

a control that was more boring and frustrating than the violent game. Boredom and frustration can also lead to increased aggression, which would possibly skew the results that researchers would obtain. Fourth, some studies do not obtain sufficient results to calculate an effect size for the participants who played the game (Gentile & Anderson, 2003). Gentile and Anderson (2003) point out that some studies have half their participants play the game while the other half simply watches. They call for future reports to include individual means in order to rectify this problem (Gentile & Anderson, 2003). Fifth, some research that studies aggressive behavior uses dependent variables that are not true aggressive behavior. For example, some research included hitting an inanimate object as an act of aggression; however, most modern definitions of aggressive behavior relate to harm to another person (Gentile & Anderson, 2003).

Finally, there are no longitudinal studies. The two point out that researchers must rely on the longitudinal studies that have been done with regards to television and movies in order to guess about the long-term effects of VVGs (Gentile & Anderson, 2003). One longitudinal study does exist, and it concluded that there were no moderate or large effects on levels of aggression for those exposed to a VVG for a period of one month (William & Skoric, 2005). Boyle and Hibberd (2005) also call for more longitudinal studies. They believe that these studies can more accurately assess the broader social and cultural impacts that VVGs may have (Boyle & Hibberd, 2005).

Another issue for future research is examining how the effects of VVGs may be compounded by the use of other violent media types (Olson, 2004). People who are playing VVGs may also be using other forms of violent media, and this may increase the risk of increasing aggressive and violent behavior. Future research also needs to experiment with children who are at risk (Olson, 2004). By at risk, Olson (2004) means children who lack

nurturing relationships or who do poorly both academically and socially at school. Some research has contended that adolescents can cope with a couple of these factors and an impact on their aggression levels may not happen; however, when too many of these risk factors are present, the chances of increased aggression becomes much more likely (Kirsh, 2003). Kirsh (2003) points out that VVGs may impact adolescents that possess a number of these risk factors, but those without these factors may not be affected by playing VVGs.

The amount of time playing video games is another issue that researchers suggest be studied in future research (Olson, 2004). It may be that a moderate amount of interactive game play may actually be healthy with regards to socializing while increasing amounts of game play may cause emotional problems (Olson, 2004). Another issue raised by researchers is that research has not examined why children play video games and what meaning the games have for the children (Olson, 2004; see also Boyle & Hibberd, 2005). While some may simply play because the games are fun and they enjoy playing with friends, others may play in order to vent their anger and release their pent up frustrations (Olson, 2004). This could possibly be healthy or unhealthy but it cannot be determined at this time without research (Olson, 2004).

Olson (2004) notes that researchers must be aware that video games are a moving target. Because the technology behind the games is continually advancing, studies that have been conducted as little as two years ago may have limited relevance with regards to the new games that are being created that contain more realistic graphics and enhanced player control (Olson, 2004; see also Boyle & Hibberd, 2005)). These improved components of video games increase the immersion that the player feels and this will ultimately change the effects that these games are having on the players (Olson, 2004). For Olson (2004) the hype about VVGs causing problems within society is not helping the research community or society in general. She

believes that research needs to get away from blanket condemnation and focus on developing educational and policy interventions based on solid data (Olson, 2004).

Boyle and Hibberd (2005) suggest the use of self-reporting with regards to young gamers and violent games. They point out that exposing young children to violent games raises some ethical and legal issues for researchers that may be alleviated through the use of self-reporting. These include experiments such as Kirsh (1998) in which young children play ultra-violent games in order to examine the effects these games have on the children. Self-reporting would allow researchers to not only examine the interpretations that young gamers have with regards to VVGs, but their perception of any behavioral impact these games may have as well. The researchers also suggest that new research examine different areas such as the influence of video game advertising on both children and parents as well as the impact of peer pressure (Boyle & Hibberd, 2005). Finally, the two recommend that future research needs to make sure that game manufacturers, retailers, and parents all understand their responsibilities and duties towards young people (Boyle & Hibberd, 2005).

With regards to research concerning VVGs, the academic world appears to be divided. There are some researchers who believe that VVGs have a negative impact on those who play them (Eastin, 2006; Kirsh, 2003; Gentile & Anderson, 2003). There are others who rebuke these claims citing criticisms about the research (Olson, 2004; Boyle & Hibberd, 2005). In addition, others have conducted their own experiments and concluded that there are no adverse effects (e.g. Williams & Skoric, 2005). It is clear that this debate is far from over, as the question of whether or not VVGs have a negative impact on those who play them is still unanswered. One of the critiques raised concerning research on VVGs is that the question of *why* people play the games is not addressed (Boyle & Hibberd, 2005). What is it about these games or about the

people who play them that makes them so appealing? The next chapter will examine theories and research as to why people view violent media content. The hope is that these theories and research may be able to shed some light on possible correlations between why people watch violent media content and why people play violent video games.

CHAPTER 4: WHY DO PEOPLE CONSUME VIOLENT MEDIA?

The first three chapters of this paper have explored a number of things. The first chapter explored the amount of violent media content in the United States as well as other countries and discussed the popularity of this content. The second chapter focused on the video game industry and examined who plays video games, what video games are being produced, and what games are being purchased. The third chapter explored academic research with regards to the effects that VVGs may have on those who play them. This chapter will examine theories explaining why people consume and enjoy violent media, particularly with regards to film and television. There is very little research that considers these issues. The purpose of this chapter is to review the theories explaining the popularity of violent television and film.

Why Do People Watch?

The few studies that have been done regarding why people consume violent media have explored a number of reasons, some of which are common among researchers. This section will discuss these various theories as to why researchers believe people use and enjoy violent media.

Sensation Seeking

The most common theory concerning why people consume and enjoy violent media appears to be sensation seeking. Zuckerman (1994) defined sensation seeking as, "the seeking of varied, novel, complex, and intense sensations and experiences, and the willingness to take physical, social, legal, and financial risks for the sake of such experience" (as cited in Hoffner & Levine, 2005, p. 211). Sensation seeking relates to individuals' need for stimulation (Greene & Krcmar, 2005). Research has found that individuals with high levels of sensation seeking require

more excitement in order to reach arousal. It has also been found that sensation seeking is linked to attraction to heavy metal music, violent television and website content, contact sports, and real crime shows. Sensation seekers typically use violent media content in order to pass time or to escape reality, which they may find boring, in order to stimulate their excitement needs (Greene & Krcmar, 2005). Greene and Krcmar (2005) conducted a study in which they surveyed 347 junior and high school students ranging in age from 11 to 18 and 263 college students ranging in age from 18 to 25. The variables measured in the survey were movie viewing and liking, television viewing and liking, sensation seeking, androgyny, verbal aggressiveness, argumentativeness, and risk-taking behavior (Greene & Krcmar, 2005). For movie and television viewing and liking, the survey gauged how often the participants watched various movies and television programs as well as how much the participants enjoyed them. The other variables that were measured were used to determine various characteristics of the participants' personalities in order to relate them to the movies and television programs that they viewed and liked (Greene & Krcmar, 2005). Greene and Krcmar (2005) found that sensation seeking predicted more violent movie viewing and that sensation seeking was stronger in relation to violent films than horror films. They also found that sensation seeking predicted liking of violent and horror movies although the liking of violent movies was stronger (Greene & Krcmar, 2005). The researchers could not find a link between television viewing or liking with regards to sensation seeking (Greene & Krcmar, 2005).

Goldstein (1999) also discusses sensation seeking as a reason why people consume violent media. He points to the fact that violent media may give people an emotional jolt and this may create an attraction to this type of media (Goldstein, 1999). He also mentions that the mere fact that violent media is considered taboo by many may be enough of a reason for the

young and rebellious to be attracted to it. By ingesting violent media content, their curiosity about the forbidden is satisfied, they learn to manage fear through the distortion of reality, and they are able to bond with others through the sharing of intense emotional experiences (Goldstein, 1999).

One of the reasons why sensation seekers may enjoy violent entertainment more than others is that they are less likely to imagine themselves as personally vulnerable with regards to the violence they watch (Hoffner & Levine, 2005). This means that sensation seekers do not fear that the violence they are viewing could possibly happen to them, and so instead of being anxious or scared while watching violent scenes, they become aroused and excited. Hoffner & Levine (2005) conducted a meta-analysis with regards to people's enjoyment of fright and violence. They analyzed 35 different articles, which contained 38 different studies (Hoffner & Levine, 2005). The authors note that violent media generally involves characters being attacked or physically harmed by another character. They add that horror media features violence but also attempts to terrify the audience, and that horror media often features supernatural or unnatural elements (Hoffner & Levine, 2005). One of the characteristics the researchers examined with regards to the enjoyment of fright and violence was sensation seeking. They found, "a significant positive correlation between sensation seeking and enjoyment of fright and violence" (p. 223).

Krcmar and Kean (2005) conducted a study of 550 adults between the ages of 18 and 78 in order to determine the relationship between media use and media liking, particularly with regards to violent media. The study examined the relationship between personality factors, measured by the NEO Personality Inventory-Revised (NEO-PI-R) and an individual's viewing and enjoyment of various television and movie genres (Krcmar & Kean, 2005). Participants in

the study completed a questionnaire that focused on the association between the NEO-PI-R personality scale, the viewing of particular television programs and movies, and the liking of those particular programs and movies. The questionnaire asked participants how often they watched television on both weekdays and weekends, how often they watched particular programs, and whether or not they enjoyed those programs. The questionnaire also contained a list of 15 movies, some of which were violent, others nonviolent, and participants were asked how often they had seen the films and how much they liked them. One of the personality factors explored by the researchers was extraversion. Extraversion consisted of six different items, which include warmth, gregariousness, assertiveness, activity, positive emotions, and excitement seeking (Krcmar & Kean, 2005). Krcmar and Kean (2005) found that excitement seeking was positively related to the liking of violent media. They also found that while extraversion did not predict violent media liking for younger viewers, extraversion was significantly and positively related to violent media liking with regards to older viewers (Krcmar & Kean, 2005). The researchers found that watching television, especially alone, was negatively related to Extraversion; however, watching movies was positively related to extraversion. They argued that movie watching was positively related because it is a social activity and individuals who rate high on the Extraversion scale enjoy activities that involve a social environment such as movie watching (Krcmar & Kean, 2005).

Aggressiveness

Another factor that researchers have found to be related to the consumption of violent media is aggressiveness. Highly aggressive boys find violent films and television programs more appealing than other children, and even preschool children's choice of their favorite fairy

tales is related to their level of aggression (Goldstein, 1999). Fenigstein and Heyduk (1985) argued that people who are preoccupied with aggressive thoughts are more interested in viewing violent media than others. Atkin (1985) argued that aggressive individuals enjoy violent media content because it glorifies the acts they might commit or they feel satisfied when a character acts in a manner that they can relate to. He also contended that aggressive individuals enjoy violent media because it allows them to justify their own behavior and feel less guilty about it (Atkin, 1985).

In their meta-analysis, Hoffner and Levine (2005) found a positive correlation between aggressiveness and the enjoyment of media violence; however, the correlations were not consistent. The three studies that Hoffner and Levine (2005) examined with regard to aggressiveness and enjoyment of violent media all reported significant and positive correlations between the two factors, but the researchers argue that methodological factors may account for why the different studies' results were not consistent. They point to the fact that the studies examined different age groups and this could have affected the results (Hoffner & Levine, 2005). They also point out that the role of gender could not be fully reviewed because only two of the three studies examined gender and this, too, could have affected the homogeneity of the results. Even when the studies that examined gender were combined, the samples sizes were so small that the findings had to be treated with great caution. Although the meta-analysis did lack homogeneity with regards to the combination of all the studies, the researchers did find a positive correlation between aggressive individuals and the enjoyment of media violence (Hoffner & Levine, 2005).

Greene and Krcmar (2005) examined verbal aggressiveness and argumentativeness with regards to viewing and liking of television and movie violence. Verbal aggressiveness was

defined as a person's willingness to deliver psychological pain, and argumentativeness was defined as an individual's attitude towards his own, as well as others', arguing (Greene & Krcmar, 2005). Verbal aggressiveness has been shown to predict a number of behaviors including alcohol consumption, video game use, and physical aggressiveness. The researchers found that argumentativeness predicted exposure to violent movies while verbal aggressiveness predicted exposure to both violent and horror movies. They also found that argumentativeness as well as increased age predicted violent movie liking while lower verbal aggressiveness predicted more horror liking. Finally, the researchers concluded that argumentativeness did predict violent television viewing while verbal aggressiveness did not; however, neither of the factors predicted the liking of television violence (Greene & Krcmar, 2005).

Gender

Boys and men consume the most violent media and they are also the target market (Goldstein, 1999). Many studies have concluded that males are far more likely to be attracted to violent entertainment than females, and this is true not only for the United States, but also, for other countries such as the United Kingdom, India, Japan, and the Philippines (Goldstein, 1999; Hoffner & Levine, 2005). Zillmann and Weaver (1996) developed a gender socialization theory to explain gender differences in the appeal of horror entertainment (Hoffner & Levine, 2005). They contend that boys are socialized not to express outward emotions of fear and distress and doing so may cause social disapproval among peers. Girls, however, are socialized that they should feel free to express these emotions (Hoffner & Levine, 2005). Zillmann and Weaver (1996) contend that horror movies allow boys to prove to their peers, and ultimately themselves, that they can remain calm in the face of danger and terror, while girls can show that they are

sensitive by reacting in a disgusted and disturbed way while watching such films (Hoffner & Levine, 2005). For Hoffner and Levine (2005), if boys are socialized this way at an early age, then the enjoyment of fright and violence may continue from childhood into adolescence and adulthood. In their meta-analysis, Hoffner and Levine (2005) did find that males enjoyed fright and violence entertainment more than females; however, they also found a smaller gender difference between adults compared younger individuals. The difference in enjoyment of fright and violence between younger males and females was greater than the difference between adult males and females. This may suggest that more adults, whether male or female, tend to enjoy fright and violence more as they age, or less adults tend to enjoy fright and violence overall as they get older (Hoffner & Levine, 2005).

Greene and Krcmar (2005) took a unique approach in their study in that they did not examine gender from a biological standpoint, but rather, a psychological one. In their study, they use androgyny theory, which suggests that masculinity (instrumental androgyny) and femininity (expressive androgyny) form two orthogonal dimensions, and argues that psychological gender offers a better understanding of gender and a more sensitive measure as compared to biological gender (Greene & Krcmar, 2005). Greene and Krcmar (2005) distinguish the two dimensions by noting that, "instrumental includes a sense of agency, in combination with a strong sense of self, while expressive implies selflessness and concern for other" (p. 75). The researchers predicted that instrumental androgyny would be positively related to the liking of violent media while expressive androgyny would be negatively related (Greene & Krcmar, 2005). In their study, the researchers found that higher instrumental androgyny and lower expressive androgyny did predict more violent movie viewing and significantly predicted more horror movie viewing. They also found that instrumental

androgyny did indeed positively predict violent and horror movie liking while expressive androgyny negatively predicted violent and horror movie liking (Greene & Krcmar, 2005). Finally, Greene and Krcmar (2005) concluded that instrumental androgyny did predict exposure to some violent television programs; however, the androgyny scale did not predict the liking of television genres. These finding are significant because males are typically more instrumental and females more expressive; however, Greene and Krcmar (2005) show that biological gender may not be the only factor that affects the viewing and enjoyment of violent media.

Other Factors

In their research, Krcmar and Kean (2005) also considered neuroticism as a factor in examining the viewing and liking of media violence. Neuroticism consists of six facets, which include anxiety, angry hostility, depression, self-consciousness, impulsiveness, and vulnerability (Krcmar & Kean, 2005). In their study, Krcmar and Kean (2005) found that all of the facets of neuroticism were significantly related to watching violent programming; however, none of the facets were related to the liking of violent programming. The two researchers also examined openness to experience and agreeableness as two other factors related to the viewing and liking of violent media. Individuals with a high openness to experience tend to be open to ideas and are willing to try a variety of activities (Krcmar & Kean, 2005). Those who score high on agreeableness tend to be trusting, straightforward, and altruistic (Krcmar & Kean, 2005). With regards to violent media viewing and liking, Krcmar and Kean (2005) found a positive association between openness and liking of violent content while there was a negative association between agreeableness and liking of violent content.

In addition, Goldstein (1999) noted several other factors that may be related to why people watch and enjoy violent entertainment. The first, Goldstein (1999) calls the justice motive. Viewers of programs, whether they are violent or not, come to relate to both the protagonists and the antagonists and eventually decide what fate they deserve (Goldstein, 1999). Throughout a movie or program, the audience may develop an animosity towards a particular bad guy, which makes any violence against him later on justified and therefore, enjoyable (Goldstein, 1999). Goldstein (1999) also argues that violent images may be a form of social control in that people who watch a large amount of violent television or movies tend to see the world as a dangerous place and, in turn, throw support towards the forces of law and order. This argument is supported by research by Gerbner and Gross (1976) and Glassner (1999). Finally, Goldstein (1999) points to the realism of violent movies and programming as a reason why people may watch. He argues that the realism of violence enhances the enjoyment that people receive (Goldstein, 1999). McCauley (1998) offered two reasons as to why realism may affect the liking of violent entertainment. He contends that the emotions caused by violent programming are weaker than everyday emotions, which causes violent imagery to become exciting instead of anxiety provoking (McCauley, 1998). He also argues that when the violence is almost real, the emotions may be as well, thus the distress is not too intense as to spoil the enjoyment that people receive (McCauley, 1998).

Greene and Krcmar (2005) explored risk taking as a factor associated with violent media exposure. The authors first discussed social deviance, which is a collection of problem behaviors that constitute a pattern (Greene & Krcmar, 2005). Some of these behaviors include deviance (e.g., vandalizing), underage drinking, drug use, and physical aggression. The authors also point to three systems of psychosocial influence that are said to affect these behaviors: the personality

system (e.g., sensation seeking), the perceived environment system (e.g., media influence), and the behavior system (e.g., school performance). The researchers focused on the perceived environment system and in particular, exposure to violent media. They predicted that exposure to and liking of media violence would be positively related to risk-taking behavior. They found that increased violent movie viewing, but decreased horror movie viewing, increased risky behavior. They also discovered that increased violent movie viewing and increased real crime viewing increased violent behavior. The authors concluded that violent media exposure had a significant influence on both risky and violent behavior (Greene & Krcmar, 2005).

Hoffner and Levine (2005) examined negative affect and arousal with regards to the consumption of violent media. In their meta-analysis, Hoffner and Levine (2005) defined negative affect during viewing as, "the subjective experience of a negative emotional state, such as fear, anxiety, or distress" (p.221). All of the studies that were reviewed by the researchers measured negative affect during viewing by self-reports. The authors used Zillmann's (1996) excitation-theory that argues that the enjoyment of suspenseful drama is the function of both the level of negative emotion response produced during the program as well as the viewer's affective reaction to the resolution (Hoffner & Levine, 2005). This means that the negative emotions that are elicited during a suspenseful program have an effect on euphoric emotions occurring after the resolution. Studies have found that the preference for a program increased as the degree of suspense increased, particularly when the resolution was positive (Hoffner & Levine, 2005). When male and female viewers were separated, Hoffner and Levine (2005) found that the correlation with negative affect was significantly stronger with male viewers; however, negative affect was associated with greater enjoyment of fright and violence for both groups.

Empathy is another factor examined in Hoffner and Levine's (2005) meta-analysis. Empathy has been defined as an individual's reaction to the observed experiences of another person (Hoffner & Levine, 2005). Many researchers have argued that empathy is an important factor with regards to the emotions that viewers experience towards television programs and films (Hoffner & Levine, 2005). Tamborini (1996) contended that viewers who had high levels of empathy should dislike horror films because of the strong negative reactions that would result from the pain and suffering of others. Zillmann (1996), disagrees, and argues that high empathy should result in the liking of horror, at least if there is a satisfying resolution (Hoffner & Levine, 2005). Hoffner and Levine (2005) reviewed six studies that considered empathy as a factor in the liking or disliking of fright and violence. The researchers found that the studies measured two major components: sympathy or concern for others' welfare and tendency to share witnessed emotional states (Hoffner & Levine, 2005). For the sake of the analysis, these components were referred to as empathetic concern and personal distress. Both of the components were negatively correlated with the enjoyment of fright and violence (Hoffner & Levine, 2005). Thus, with regards to empathy and the enjoyment of fright and violence, research appears to support Tamborini's (1996) argument that those with higher levels of empathy are less likely to enjoy violent media content.

One final factor reviewed by Hoffner and Levine (2005) was age. The authors predicted that there would be a curvilinear relationship between age and the enjoyment of fright and violence (Hoffner & Levine, 2005). This means that enjoyment would increase during childhood, peak during adolescence, and then decline thereafter. The researchers divided the studies in their meta-analysis into those that examined the enjoyment of violent children's media and those that did not. The latter group, which examined the enjoyment of horror media as a

genre, was divided again on the basis of age of participant (children, adolescents, or adults). The authors found that the studies in the group that examined the enjoyment of horror as a genre were consistent with the curvilinear relationship they had predicted. These findings supported the researchers prediction that enjoyment of violent media would rise during childhood, peak during adolescence, and then decline thereafter. In the studies that examined violent children's media, age was not consistently related to enjoyment. While the authors did find some support for their curvilinear relationship between age and the enjoyment of fright and violence, they discuss the need for more studies, specifically involving people across their life span in order to further address age as a factor (Hoffner & Levine, 2005).

Limitations & Future Research

Despite the research on why people consume and enjoy violent media, there are significant limitations and questions that need to be addressed in future research. Goldstein (1998c) points to the question of whether explaining the attraction to violent media should be studied on the macro or micro level. On the macro-level, the explanation would focus on society as a whole and how changes in society affect the opinion of violent entertainment as well as the relationship between violent imagery and social institutions (Goldstein, 1998c). Krcmar and Kean (2005) argue for an examination on this level, contending that most research, including their own, focuses on psychological characteristics of individuals and neglects to explore the attraction to violence as a social phenomenon. A micro-level explanation explores violent images and the individuals who are attracted to them (Goldstein, 1998c). Would one of these explanations better answer the question of attraction to violent entertainment? How connected

are the two levels of explanation and on what levels are they connected? These are a few of the questions that would arise in exploring what Goldstein (1998c) proposes.

Goldstein (1998c) also notes that aside from characteristics such as gender, sensation seeking, and individual differences in aggression, little is known about the different characteristics of audiences for the different forms of violent entertainment. Are those who watch violent movies the same as those who watch real crime programs? Do they share similar personality traits and experiences? These individual differences that Goldstein (1998c) discusses appear to be similar to the moderator effects that Gentile and Anderson (2003) point to in their examination of limitations in studying the affects of VVGs. Taking these factors into account in future research could possibly change the results that have been seen or may shed more light on why people consume, as well as enjoy, violent media.

Along with a lack of exploration of individual differences, there is also virtually no cross-cultural or cross-national analysis on the appeal of violent media (Goldstein, 1998c). In Japan, there are very violent images in many comic books that are read and enjoyed by both men and women (Goldstein, 1998c). Goldstein (1998c) questions whether their enjoyment of this violent media is similar to Westerners enjoyment of Arnold Schwarzenegger movies. Violent media is not an American phenomenon, and studies have shown that males are drawn more to violent entertainment than females regardless of whether it is in the United States, Europe, or even Japan (Goldstein, 1999). Cross-cultural and cross-national studies could possibly help explain the attraction to violent entertainment for humans in general, or it could help explain the differences in attraction to different forms of violent entertainment based on specific cultures and nations.

Finally, some researchers point to a lack of published studies exploring the attraction to violent entertainment (Goldstein, 1998c; Hoffner & Levine, 2005; Krcmar & Kean, 2005).

Krcmar and Kean (2005) point out that although there are hundreds of published studies that have sought to explain the effects of exposure to media violence, “only a handful have attempted to explain why audiences tune in specifically to media violence in the first place” (p.400). Hoffner and Levine (2005) note that because there are relatively few published studies available that seek to explain why people are attracted to violent media, any conclusions should be regarded with caution. This lack of research is surprising, especially because of the impact that violent media appears to have on society. Hundreds of studies have attempted to examine the effects of violent media, but few studies are seeking to explain why people are attracted to this type of media in the first place. Even with all the studies published concerning the effects of violent media, individuals are still attracted to and consume that media (Krcmar & Kean, 2005). Until more research is done on understanding why individuals are attracted to violent media, academia will be hard pressed to provide an answer as to why this is so.

When it comes to why people consume and enjoy violent media, researchers have found a number of factors they believe help explain this phenomenon. Researchers have linked factors such as sensation seeking, gender, age, and aggressiveness with the consumption of violent media. Those same researchers, however, have also pointed out that there is still far too little research in this area of study to conclusively answer any questions (Hoffner & Levine, 2005; Krcmar & Kean, 2005). The next chapter will attempt to explore why people play VVGs. There has been practically no research done with regards to this area of study so this paper will have to partially rely on the theories that were discussed in this chapter. Using these theories as well as information regarding the various characteristics of video games, and VVGs specifically, the next chapter will seek to hypothesize some theories as to why VVGs are popular.

CHAPTER 5: WHY ARE PEOPLE PLAYING VIOLENT VIDEO GAMES

Similar to violence in television and film, numerous studies have explored the effects of playing VVGs (e.g. Gentile & Anderson, 2003; Olson, 2004; Williams & Skoric, 2005); however, there are precious few that actually discuss why people play these games in the first place. This chapter will review some of the minimal research that has been done with regards to this topic and attempt to link these studies with the previously discussed theories about the consumption of violent television and film. In other words, this chapter will attempt to estimate the extent to which the consumption of VVGs is related to violent media in general, or whether this is a unique phenomenon. Finally, this chapter will discuss the limitations of this paper and what the author believes needs to be done in future research. The hope is that this chapter will provide a stepping-stone for the much needed future research in this area of study.

In 1993, the fighting game, *Street Fighter II*, made $1.5 billion dollars (Goldstein, 1998a). That same year saw the release of two versions of the popular VVG, *Mortal Kombat*. Sega released the original version, which included all of the blood, gore, and fatalities, and Nintendo released a version in which the violence in the game was toned down. The more violent Sega version of *Mortal Kombat* outsold the less violent Nintendo version 7 to 1 (Goldstein, 1998a). In the final months of 2004, five violent games were all in the top ten sales on both American and British sales charts (Jansz, 2005). Violent games such as *Grand Theft Auto: San Andreas* and *Halo 2* were topping console game charts while violent computer games such as *Counterstrike* and *Half Life* demonstrated the popularity of violent games as online multiplayer experiences (Jansz, 2005). What makes these violent games so popular and why are video game players playing them?

Application of Media Theories to VVGs

In reviewing the various theories as to why people watch violent media, many of these factors could possibly be linked to why people play VVGs as well. Zillmann's (1996) negative affect and arousal theory emphasizes the impact of suspenseful scenes affecting the viewer's response to a resolution, regardless of whether it is positive or negative. The suspense of VVGs should intensify as the game progresses towards a resolution and this will affect the response of the player. If the player succeeds at the game, his enjoyment should be intensified. If he fails at the game, then his disappointment should be intensified. Empathy is another factor explored with regards to watching violent media that could also be linked to VVGs. In fact, this may be more so with VVGs than with violent television and film. Just as viewers become empathetic toward characters they are viewing, game players become empathetic toward the character they take the role of. Because the game player is actually making choices and creating resolutions to the suspenseful situations that arise, the empathy a game player feels toward his character should be more intense than the empathy an audience member feels towards a film character. A viewer can only watch what happens. The VVG player will know that his decisions have either helped his character succeed or caused his character to fail and this should create a highly empathetic experience.

Another characteristic that should affect the playing and liking of VVGs is aggressiveness. It was found that aggressive individuals might like violent content on film and television because it allows them to justify their own behavior and feel less guilt about their actions (Hoffner & Levine, 2005). This should be similar for VVG players because they can actually enact their aggressiveness in the game and take part in the violence that occurs instead of being a passive observer. The interactivity of violent games should be very appealing to

aggressive individuals, and the ability to play against other people in an online environment may cause aggressive individuals to vicariously and indirectly take out their aggressive desires on other individuals.

Sensation seeking is another factor that should affect the use of and liking of violent games. Greene and Krcmar (2005) found that sensation seeking was a predictor for the use of violent media but not for the liking of that media. This may be different for violent games because of their interactivity. VVGs allow sensation seekers to actually engage in violent and aggressive acts on the screen instead of only being able to watch them. Sensation seekers also may be less likely to imagine themselves vulnerable to the acts depicted in violent media (Hoffner & Levine, 2005). This should be true as well for VVGs. Sensation seekers could be able to separate themselves from the violence they are committing within the games, which would allow them to get more enjoyment out of playing. Escapism is related to sensation seekers as to why they watch violent media (Greene & Krcmar, 2005). The feeling of being able to escape should be more intense for players of VVGs, and this may cause sensation seekers to enjoy them more than violent media. Violent games are also continually becoming more and more realistic, and as this happens, sensation seekers may become more attracted to these games because of how real they appear.

Age may be a difficult aspect to discuss with regards to playing VVGs. Young gamers may play and enjoy violent games simply because of the violence or they may enjoy them because they have been deemed too young to play them and by playing them they are going against society's rules. Older gamers may play violent games because they are allowed to enjoy the violence within the games. They may also play them because playing and enjoying a violent game may make them feel young at heart. Age is a factor that needs to be researched further in

future studies. The curvilinear relationship between age and enjoyment of fright and violence in media that Hoffner and Levine (2005) discovered would probably be different for age and enjoyment of violence in video games. This author would hypothesize that one would see an increase in enjoyment of VVGs during childhood that would peak at adolescence just as Hoffner and Levine (2005) predicted with films and television; however, this peak would remain throughout adulthood and not decrease as it does with films and television. This may be due in part to the active role that a game player takes on. Because the player is in control of the violence that occurs in the game for the most part, adults may enjoy VVGs more than violent television and film. They may feel that they are in more control of their emotions and playing VVGs may be a way of discharging daily stress that comes from a variety of areas such as a job, financial obligations, personal or family problems, etc. These postulations can only be affirmed or denied; however, through future research regarding the enjoyment of VVGs with regards to age.

Why Do People Play VVGs?

Researchers have rarely explored the questions raised above. Malone (1981) points to several characteristics of video games that may explain their popularity among boys: uncertainty, speeded responses, multiple levels of difficulty, sound effects, feedback/scoring, and gradually revealed hidden information (Goldstein, 1998a). Goldstein (1998a) adds that these are characteristics of video games in general, but that violence can be featured in many of these ways. He argues that it may be difficult to see the potential in video games that contain these characteristics without relying on shooting, intercepting, and chasing themes (Goldstein, 1998a). In other words, Goldstein (1998a) argues that violence is very much a part of the characteristics

that Malone (1981) believes attracts boys to video games. Goldstein (1998a) points to the element of control as an important difference between VVGs and violent images on television and film. He argues that because gamers control what takes place on the screen, they have an increased control of their own emotional states during game play (Goldstein, 1998a). Goldstein (1998) notes that studies have shown that perceived control over events reduces emotional and stressful responses to these events. VVG players have this perceived control over events while playing. This control over what is on the screen and the increased control over one's own emotional state, may help explain why VVGs are popular.

Jansz (2005) is one of the few researchers who has attempted to explain the appeal of VVGs. In his work, he notes that many studies have attempted to explore the effects of violent content in games on behavior, yet few have actually examined why people play the games in the first place (Jansz, 2005). In his work, Jansz (2005) uses "psychological theories about mediated emotions to argue that violent games offer a unique environment in which emotions can be explored in ways that are generally impossible in real life" (p. 221). For Jansz (2005), the world of the video game allows the gamer to experiment with various emotions and identities, which may help him deal with the insecurities of adolescent life.

Before beginning his theoretical analysis, Jansz (2005) lists a number of elements within video games that distinguishes them from other media genres. The first element is interactivity. Video games require the player to interact with the game (Jansz, 2005). If there is no interaction, then the game ceases to exist. There cannot be a video game unless there is a player to play it. The second element is the rule-based nature of video games, which enables the implementation of games on a computer or console. The third element is that video games have a variable and quantifiable outcome. Players do not know how the game will progress in advance, but as the

game moves forward, they learn how their actions affect the various outcomes of the game. The fourth element is the link between game and player. In order to be successful in the game, the player must spend time learning the various facets of the game and acquiring the skills that are necessary to achieve whatever outcomes may be possible (Jansz, 2005). Jansz (2005) points out that in most violent games, the effort required to learn is intensified because of the high velocity of the games. The final element of video games is the attachment between player and outcome (Jansz, 2005). According to Jansz (2005), it is part of the game to win and to be happy with winning.

These various elements of video games have caused video games to be labeled "lean forward media" (Jansz, 2005). Lean forward media include media genres that require active and concentrated involvement of users. This type of media differs from "lean back media," which tend to be less demanding and users can engage with this type of media rather passively. Film and television are examples of lean back media (Jansz, 2005). Jansz (2005) remarks that video games are a prototypic form of lean forward media in that enjoying them requires effort on the part of the gamer, which may cause an experience of presence. This experience of presence may enable gamers to escape from ordinary life, which may help explain why video games in general are so popular (Jansz, 2005). From here Jansz (2005) begins his exploration of why violence in video games is so appealing.

Incitement of Emotions

Jansz (2005) uses Tan's (2000) definitions of emotions in his work with regards to VVGs and the incitement of emotions. Tan (2000) distinguishes between aesthetic emotions that are directly related to the artifact (A-emotions) and emotions that arise from the world that is

represented in the artifact, representation emotions (R-emotions). In violent games, a player may experience A-emotions when they admire the way a particular violent scene plays out, and R-emotions may occur when the experience of presence is maximized and the player experiences the game world as if it were truly reality (Jansz, 2005). Jansz (2005) uses three theories concerning emotion to try and help understand the emotions that are involved with VVGs.

The first theory is Zillmann's (2003) affective disposition theory, which states that the audience's emotions occur in response to how they view the various characters. For example, positive emotions are elicited when there is a good outcome for a good character and negative emotions may occur when a certain character does not hold to the moral judgment of the audience, making him a bad character (Jansz, 2005). In viewing violent media, the audience is constantly judging the actions of the characters and this elicits various emotional responses as the plot moves forward. Gamers, however, are active participants in the story. They determine the actions of their game character and how the game unfolds (Jansz, 2005). For Jansz (2005) this means that gamers cannot evaluate the character's actions and the unfolding of the story against their own expectations because they are creating the story from those expectations. This is different from a movie viewer who is only able to watch the story unfold as those who created it chose to have it do so.

The second theory used by Jansz (2005) is Tan's (1996) genuine emotion machine theory, which holds that films are able to elicit emotions from the audience because when something emotionally significant occurs, the audience members put themselves into that imaginary world. Tan's (1996) theory was developed with regards to lean back media and the fact that the audience witnesses emotional scenes but is unable to do anything about them. This limits Tan's applicability to video games; however, the idea that media users imagine themselves

within the world they are witnessing is very applicable to video games (Jansz, 2005). Violent game users may even elicit stronger emotions because not only can they imagine themselves in the game world, but they can also control the events of that world and watch the world unfold the way they see fit.

The final theory used by Jansz (2005) is Oatley's (1999) simulation theory. This theory states that literary simulations may produce three kinds of aesthetic emotions (Jansz, 2005). The first kind is spectator emotions, which occur when a reader sympathizes with the feelings of a character. The second kind is memory emotions, which occur when a reader is reminded of similar emotional experiences in their own lives. The final kind is identification emotions, which occur when the reader identifies with one of the characters (Jansz, 2005). For Jansz (2005), simulation theory is important in understanding emotions in video games because of the active role of the media user. Gamers experience all three of Oatley's (1999) emotional simulations but in different ways from traditional media. First, the gamer may sympathize with what their character is going through during the game and experience spectator emotions. The gamer may recall a similar event in his own life, which could elicit memory emotions. Finally, many gamers identify with the characters they play as and this may cause identification emotions to occur. The active role of the video game plays an important part in the gamer's experience of these emotional simulations. When using literature, the reader must rely on his own thoughts and imagination in order to place himself within what is being read, and no matter how good one's imagination is, one can only be a spectator in the world of literature. In the video game world, this is not true. The gamer gets to see his thoughts and imagination come to life on the screen while he is playing the game. The gamer also gets to take part in these emotions through playing the game. If, for example, the player begins to elicit memory emotions from a particularly bad

memory during the course of the game, the player can attempt to change the actions of his character to try and alter the story and, ultimately, the emotions that the player feels. This cannot be done in literature, as the reader cannot alter the outcome of the story no matter how many times it is read.

Participatory Emotions

Jansz (2005) argues that the interactive nature of video games make the emotions that are triggered different from the ones that occur with traditional media and these emotions he calls "participatory emotions." Contrast to the third-person perspective that lean back media users experience, gamers experience a first-person emotional experience (Jansz, 2005). Jansz (2005) proposes a theory about the incitement and experience of emotion in VVGs by examining how the emotion process unfolds step by step and applying it to VVGs. The first step in the emotional process is appraisal, in which an event occurs and the individual recognizes this event and the fact that it raises his interests or concerns (Jansz, 2005). In VVGs, these events may occur in a variety of ways. An event may occur resulting in a threat to the character's life, which may elicit fear. Another event may occur in which the player's action results in the life of a teammate being at stake, which may elicit shame. The second step in the emotional process is context evaluation, in which the individual decides how he is going to deal with the situation that elicited the emotion. At this point for gamers, they may ask themselves why they are experiencing the emotions that they are as well as how they are going to react in the game world in order to engage with whatever situation is occurring (Jansz, 2005).

The third step in the process is readiness to act (Jansz, 2005). Certain emotions cause people to act in various ways. In a VVG, fear may cause a player to want retreat from a specific

situation while anger may cause the player to desire to kill another character or even torture a character before killing him in order to vent the anger that has been aroused. The final step in the emotional process is the translation from emotion to action (Jansz, 2005). This includes facial and body expressions as well as the translation of readiness into actions. In the video game world, these activities may include an angry player killing innocent characters randomly. These activities may have an impact on the outcome of the game. Other activities may also occur outside of the video game reality, such as sighing or yelling at the screen, that do not affect the outcome of the game (Jansz, 2005).

The emotions elicited by game content may be positive, negative, or both (Jansz, 2005). Positive emotions such as the admiration of the game environment as well as success within the game tend to prolong game play as the player desires to remain in the situation that elicited the positive emotions. Negative emotions may also cause prolonged game play. An angry player may continue playing in hopes of getting revenge on the character that aroused his anger (Jansz, 2005). Jansz (2005) notes that the relationship between playing time and certain negative emotions such as fear and disgust is less straightforward. When people experience fear and disgust, they tend to retreat from the situation that is causing those emotions (Jansz, 2005). This tendency can easily be realized in the game world as gamers can simply turn off the game in order to retreat from the situation. Many gamers, however, choose to remain in the situation, which may prolong the experience of negative emotions (Jansz, 2005). The save feature on many games even allows gamers to return to a certain point either to overcome the situation or to simply enjoy it again and again. Jansz (2005) claims that continuous use of VVGs is gratifying for many adolescent gamers regardless of the types of emotions that are elicited. His final section seeks to explain why this may be so.

Construction of Identities and Experiences

Jansz (2005) argues that the gratifying properties of playing VVGs for adolescent males comes from the challenges they face in regard to constructing their identities and coping with their emotions. Research regarding males in late adolescence and early adulthood has shown that they often feel insecure about their identities and the emotional aspects of masculinity (Alloway & Gilbert, 1998; Goldstein, 1999; Hoffner & Levine, 2005; Jansz, 2005). Research has also indicated that male adolescents are heavy users of entertainment media (Roberts, Foehr, Rideout, & Brodie, 1999; Jansz, 2005). Recall that 62% of video game players are males (ESA, 2007a). VVGs allow male adolescents to assume the identities of various characters within a rule-based world (Jansz, 2005). Here they can experiment with these various identities without exposing themselves to the real world. VVGs also allow adolescent males to experience various emotions that they may not be comfortable with and learn how to cope and deal with these different emotions. For example, players can assume the hyper-masculine role of Tommy Vercetti in *Grand Theft Auto: Vice City*, and experience the identity and all the emotions that come with it without worrying about being judged by parents or peers. Adolescent males can also experience more vulnerable emotions such as fear and disgust without having to worry about being labeled as weak or non-masculine by other adolescent males (Jansz, 2005). Jansz (2005) argues that the gamer may enjoy the feelings that he gets when he experiences different emotions, but the exploration of these emotions may also cause the gamer to evaluate who he is and what he feels. The result is that the emotional experience is interrelated with identity work as the player may actually develop part of his identity through playing the game.

Jansz (2005) claims that video games elicit both positive and negative emotions from gamers that are different from those elicited by other media genres such as film and television.

The emotions generated by VVGs are particularly appealing to male adolescents (Jansz, 2005). According to Jansz (2005), violent games allow a male adolescent to "perform a radical macho-identity, or take his anger to its extremes by destructive actions, or engage himself with disgusting actions without having to fear reproaches by parents or peers" (p. 236). These violent games also allow male adolescents to experience emotions such as grief, shame, and fear in ways they may not feel comfortable revealing to their friends (Jansz, 2005). For Jansz (2005), this is the appeal of VVGs. These are the reasons why VVGs are so popular and why they top sales charts, not only in America, but in other countries as well.

Limitations and Conclusions

The intent of this paper was to give the reader an overview of violent games, review literature pertaining to why people watch violent media, and examine research on why people play violent games. This paper is not without its limitations. There are few articles that examine why people watch violent media. There are even fewer articles that examine why people play VVGs. Because of this, the author had to review articles that discussed why people view violent media and then speculate about possible links between watching violent media and playing violent games.

The video game industry is a billion dollar industry in the United States (ESA, 2007a), a half-billion dollar industry in Canada (ESAC, 2007), and video games are a huge market in Japan as well (JETRO, 2007). Video games are a global phenomenon. VVGs appear to be a popular subset of video games, as 34 million VVGs were sold in the United States in 2006 (ESA, 2007). This is not to say that VVGs are solely an American phenomenon. Studies have shown that violent entertainment is attractive around the world, and particularly attractive to males

(Gunter & Harrison, 1998; Goldstein, 1999; Hoffner & Levine, 2005). This author believes that the main reason why video games and VVGs in particular are a growing phenomenon is the sense of control they offer to the gamer. Numerous studies have pointed to control as being a draw of VVGs (Goldstein, 1998a; Gentile & Anderson, 2003; Jansz, 2005). VVGs allow the user to exert an amount of control that may not be available in other forms of entertainment media. While viewers of violent television and film may have some control in that they can stop watching, VVG players exercise much more control over the games they play. Yes, they can turn off the games just as viewers can turn off a film or television show, but when a viewer turns the film or show back on, they still cannot control *how* the violence will unfold. The VVG player is able to do this. The player can make the game as violent or nonviolent as he wants. The player can also change the pace of violence continuously throughout the game. The extraordinary amount of control that is given to VVG players is what sets VVGs apart from every other form of violent media entertainment and makes them appealing to a wide range of game players.

Another characteristic of VVGs that makes them so popular is the active role of the user. VVGs cannot work unless there is a player controlling the action of the game (Jansz, 2005). This active role that the player takes on makes VVGs unique from other violent entertainment forms. The player gets to choose the actions of his character. The player gets to choose how he will interact with the game environment. Many games nowadays allow gamers to indulge in their most violent and aggressive fantasies (e.g. *Manhunt*, *Fable*). The player can act however he chooses while in the game environment. This creates an appeal of VVGs because the player can not only get enjoyment out of his actions, but also not have to worry about any consequences for those actions.

A final factor that the author finds for the popularity of VVGs is identification. Research has theorized that viewers of violent media identify with the characters they are viewing (Zillmann, 1996). Research on VVGs argues that game players also identify with the characters they play as throughout the game (Jansz, 2005). Because the game player controls the actions of his character and ultimately determines the fate of the character, this author argues that identification with a VVG character is much stronger than identification with a character in a violent film or television program. Being able to identify more strongly with a game character may be another reason why VVGs are so popular.

This paper has made a couple of contributions to this very limited area of research. First, this paper has attempted to show that VVGs do fall into the general category of violent media. It has also shown that while there are some similarities between the two, there are also many differences and these differences make VVGs unique and worthy of study. Second, this paper has begun to ask the questions that need to be asked in future research of VVGs. Why are VVGs so popular? What makes a VVG different from other forms of violent media? Are the differences between violent media and VVGs the only thing that makes people want to play them or is there something else? In asking these questions, this paper has opened the door for future research.

Future research in this area of study is clearly needed. Video games continue to be a very popular form of entertainment, and the violence in these games will likely continue to increase and become more realistic. Therefore, researchers will need to continue to discuss the effects that these games are having on the players. Many researchers concerned with such effects have called for the need for longitudinal studies as well as self-response surveys (Olson, 2004; Gentile & Anderson, 2003; Boyle & Hibberd, 2005). This author, however, believes that additional

research is needed to explain why people play these games in the first place. The average game player is 33 years of age and has been playing video games for 12 years (ESA, 2007a). Self-response surveys and longitudinal studies concerning why these people are playing video games, and in particular violent games, will help researchers immensely in this area of study. Until more research is done concerning why people are attracted to, play, and enjoy VVGs, the phenomenon of violent games will remain a mystery.

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