

Video Games: Changing the Perspective

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Introduction

How Violent Video Games Fit in With Violent Behavior

By JON M. CHANG · Sept. 18, 2013

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Figure 1 – Image from Jon M. Chang, “How Violent Video Games Fit in With Violent Behavior,” ABC News

Just a few years ago, headlines like this were continuing to flood the internet. The common theme throughout many of them were violent video games make people more violent and the result was mass killings or workplace shootings. This is just one of the many perceptions that have been driving society’s view of video games for the past few decades they have existed. There are many beliefs held saying video games make you dumb, ruin your life, and they are a waste of time because you won’t get anywhere with them. However, in the last few years we have begun to see perceptions change. The headlines on the internet are beginning to take a new form as the public perspective begins to match the evidence being presented through new research and the rise of video games as a premier form of entertainment. Here is an example from CNN:

Do video games lead to violence?

By Susan Scutti, CNN

Updated 10:23 AM ET, Tue July 26, 2016



Figure 2 – Image from Susan Scutti, “Do video games lead to violence?”, CNN

In the article, author Susan Scutti looks at both sides of the arguments and research, instead of just casting a large brush across video games as detrimental to society. Readers can see how the 18-year old gunman was a fan of first-person shooter video games and the American Psychological Association and American Academy of Pediatrics disagree with children playing violent video games, but they also get perspectives from the opposite end of the spectrum. The work of associate professors Whitney DeCamp and Christopher Ferguson are mentioned. Their studies demonstrate the existence of little to no correlation between playing violent video games and violence.¹ As perspectives on the effects of violence in video games begin to change, so are other perspectives. Perceptions that only little boys play video games or the idea that video games destroy your life are beginning to change as well. In many ways, the perspectives of the past are merely misconceptions regarding the current nature of video games and their position in our society.

Violence, Aggression, and Desensitization

The defining question for so long has been whether video games, especially violent ones, cause people to become more aggressive, violent, or even desensitized to violence. For many years, the perception was they were detrimental to society and particularly damaging to children. These concerns may have started with such instances as the 1999 Columbine High School killings because perpetrators Eric Harris and Dylan Klebold were said to be obsessed with the violent video game *Doom*. While initial news articles and studies linked video games to acts of aggression and violence, ensuing academic studies suggest there is no link. Originally, the research and studies on this issue pointed towards children and teenagers becoming more aggressive the more they played games that involved violence. In a study led by Dr. Brad Bushman, a professor of communication and psychology at Ohio State University, one set of participants played violent video games for several days and another set played non-violent video games. Afterwards, the participants read ambiguous stories about potential conflicts

along with the ability to blast other participants with noise through headphones. According to Dr. Bushman, the more violent group, which blasted others with louder noises, played violent video games.² However, there are other researchers that argue the opposite. In the book *Rules of Play: Game Design Fundamentals* by Eric Zimmerman and Katie Salen Tekinbaş, the authors discuss the ability of humans to separate play violence from real violence. This ability to separate helps keep video games and other forms of media from making us more violent, aggressive, or less sensitive to instances of it.³ Christopher Ferguson, a psychologist at Stetson University in Florida, measured the consumption of violent video games against youth violence rates of the previous 20 years. The study concluded the rise of violent video games coincided with a fall in violent crime perpetrated by 12- to 17-year-olds. In his study, Dr. Ferguson, also questioned the validity of other studies on the matter. He wrote:

The degree to which laboratory studies faithfully capture the media experience is also debatable. Many such studies provide exposure to only brief clips of media, rather than full narrative experiences, in which violence exposure is outside of a narrative context. The resultant aggressive behaviors are also outside a real-world context, in which aggression appears to be sanctioned by the researchers themselves, who provide the opportunity for aggression.⁴

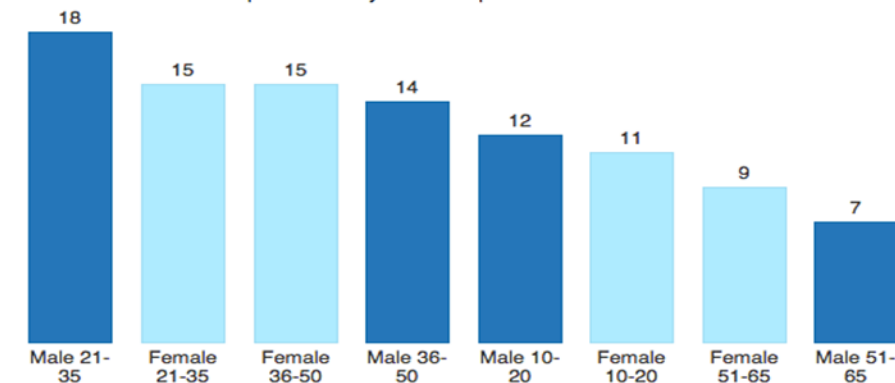
The earlier studies happened in environments that could result in more aggressive participants, and at the most they could only show casual correlation between short-term violence and violent video games. Further studies suggest that violence in video games may not desensitize us either. In one study on the effects of video games, German researchers recruited 15 men (average age of 23) who have played video games with violence for at least four years. Another group was composed of similar aged men who had little to no experience with violent video games. The researchers used functional magnetic resonance imaging (fMRI) as participants looked at images of violent scenes and neutral scenes. The participants also used questionnaires to describe their feelings of the images. The researchers found the gamers reacted the same as the non-gamers. They both expressed similar amounts of empathy and

aggression, and their brain scans did not show any signs of a difference in desensitization to violence.⁵ Another study by Canadian researchers comparing gamers to non-gamers found in the long-run both groups expressed the same levels of emotion towards violent images. There was no difference in memory, physical arousal, or feelings.⁶ Furthermore, a 2001 U.S. Surgeon General's report claimed the strongest risk factors for instances of violence, such as school shootings, were related strongly to mental stability and quality of home life rather than media exposure. Studies indicating that video games make us more violent merely show a casual correlation at the most, which means that maybe violent people like violent video games rather than creating violent individuals. This correlation creates the potential for video games to help identify troubled individuals or identify symptoms of mental instability through the use of video games.⁷ Ultimately, video games do not appear to be these detrimental objects that many people once perceived them as. They are opportunities for individuals to live scenarios they never imagined and enjoy themselves in a space we separate from reality. Just because a teenager decides to run over civilians in *Grand Theft Auto* does not mean they will run over pedestrians when they get their license.

Video Games are for Boys

The changing face of video games

Of the 190 million people playing games in the U.S., the stereotypical gamer -- boys and men between 10 and 25 -- represents only about 15 percent.



Source: Newzoo

The Washington Post

Figure 3 – Graph from Drew Harwell, “More women play video games than boys, and other surprising facts lost in the mess of Gamergate,” *The Washington Post*

One of the reasons that people may have become fearful of video games causing violence could be related to the perspective that boys were the primary consumers of video games. Eric Harris and Dylan Klebold were both teenage boys, and perhaps they were seen as the typical consumer of violent video games. However, that is probably one of the biggest misconceptions in the video game market. The fact is, adults comprise 66% of the personal computer market and 62% of the console market.⁸ 49% of American adults play video games, which means the game industry caters to adults.⁹ This is mainly the case because the generation of adults playing games right now grew up playing video games in the 1990s or the 1980s or even quite possibly before that. At the same time, 60% of Americans think that gaming is a male activity.¹⁰ In a 2015 report titled “Teens, Technology, and Friendships,” Pew Research Center revealed that 59% of girls 13-17 play video games.¹¹ However, you might not know that because 47% never play online and 27% say they never play with someone else in the room.¹² Add the fact that only 9% of girls use a microphone while playing video games online and we can see why it appears that girls are nonexistent in the gamer community.¹³ In many cases, boys are probably playing against girls

online and are assuming their opponents are other guys because those guys are the ones using their microphones. The design of video games also plays to this misconception. Many of the video games that are heavily marketed are made towards a male audience - like *Middle Earth: Shadow of Mordor*, *Battlefield*, *Call of Duty*, and *Madden* – and that helps maintain this misconception that almost all gamers are males, though males who play video games are more likely to identify as “gamers” than females who play video games.¹⁴ Games like *The Sims* have been instrumental in drawing larger portions of females into the gaming market and in some instances powerful female characters can serve as an inspiration. My younger sister loves the *Tomb Raider* games. The lead character is Lara Croft, a smart and tough female character that can do seemingly anything. Originally Lara was just another female video game character that suffered sexual objectification, but with a growing female consumer base and changing social standards she has undergone a new remodeling. Now, Lara Croft and other female characters are increasingly serving as symbols for girls to build upon and empower them to achieve their highest aspirations. Today, women slightly outnumber men on online video games largely due to the growing popularity of mobile gaming, but that doesn’t mean there aren’t problems within the online community that still need handled.¹⁵ Many still consider the online gaming community to be a man’s realm, which means there is a persistence of misogyny and locker room talk within some circles. In her article “What it’s Like for a Girl Gamer,” Elisa Meléndez describes how after her account was honored on Xbox Gamer Spotlight many of the messages she received were congratulatory, but she also received a number of “Come-Ons or Denigration” due to her sex.¹⁶ Clearly, there is some maturing and cultural changes that must take place in the online community before everyone can feel accepted. Ultimately, as females begin to play more video games and appear more online, the market will continue to shift and produce more games targeting that audience and the community will change. Then this misconception that only boys play video games will finally disappear.

Video Games Make You Dumb

Along with the perception that most of the consumer base for games was children, comes this perception that it was making the youth dumb. Going through different studies and research, it appears that the opposite is true. We are learning there are many benefits from playing video games.

Researchers from Max Planck Institute for Human Development and Charité University Medicine St. Hedwig-Krankenhaus had one group of individuals play Super Mario 64 for 30 minutes a day over two months and had another group that did not play video games. MRI scans of the gamer group showed increased brain volume in the right hippocampus, right prefrontal cortex, and the cerebellum. These are the regions of the brain responsible for memory formation, strategic planning, muscle control, and spatial navigation. The scans also showed “significant gray matter increase” which is correlated with better memory. The researchers theorize that video games could be used to counteract risk factors for mental disease like smaller hippocampus and prefrontal cortex volume involved with post-traumatic stress disorder, schizophrenia, and neurodegenerative disease. Lower gray matter is often correlated with bipolar disorder and dementia.¹⁷ Another group of scientists from the University of Rochester discovered that playing action video games helped people make decisions quicker. One group of 18- to 25-year-olds played *Call of Duty 2* and *Unreal Tournament* and another group played the slower-paced *The Sims 2*. After playing for 50 hours, participants were asked to look at a screen and answer a question about the image as quickly as possible while completing an auditory task. According to their results, the action game players were almost 25% faster making a conclusion and were right just as often as the strategy game players. The action game player’s brains became more efficient at collecting visual and auditory information, allowing them to come to a conclusion quicker. From this study, the researchers found that playing video games improved skills like multitasking, driving, tracking objects, navigating, and driving.¹⁸ Another discovery from the study was the action gamers became 58% better at perceiving

differences in contrast. This included a 43% improvement in ability to discern different shades of gray. According to Dr. Bavelier, “When people play action games, they’re changing the brain’s pathway responsible for visual processing. These games push the human visual system to the limits and the brain adapts to it...”¹⁹ This seemingly counters the age-old perception that sitting in front of a screen would ruin an individual’s vision. Video games also improve critical-thinking skills due to the fact that gamers constantly face new problems and sometimes they have to attempt a varying number of solutions to solve them.²⁰ As we continue to learn more about the benefits of video games for our brain, they may increasingly be used in learning environments to educate children and rehabilitate different mental issues. Recently, *Minecraft* has been a game appearing in schools that children can play on their school-issued tablets. The game offers a new and fun way for elementary and even middle school children to learn about new topics. Teacher Stephen Reid has employed *Minecraft* in his classroom to teach student about biomes, the concepts of electronics and circuitry through the games red stone element, and help them learn collaboration through building structures and recording how they got to their finished product.²¹ With games like *Minecraft*, video games could potentially be part of the next revolution in education.

People That Play Video Games Have No Social Life

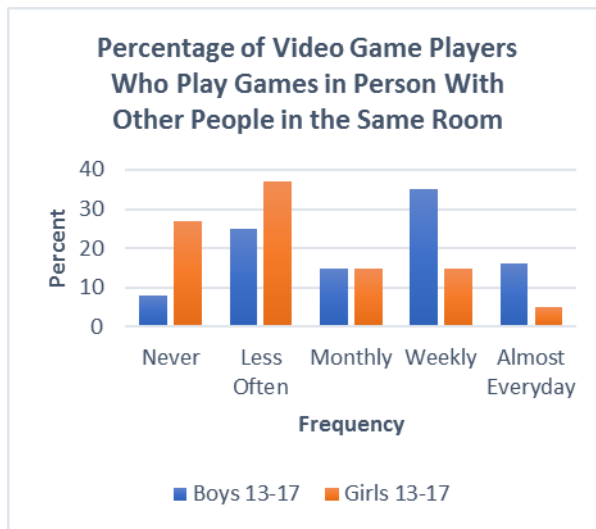


Figure 4 – Data from Pew Research Center, “Teens, Technology and Friendships”

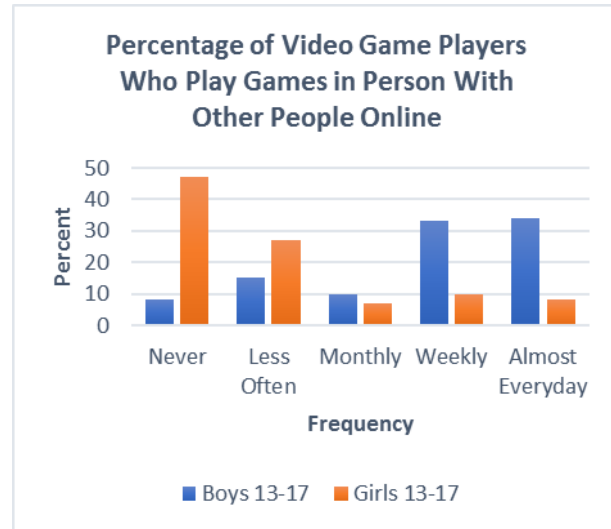


Figure 5 – Data from Pew Research Center, “Teens, Technology and Friendships”

Many seem to believe that playing video games ruins an individual’s social life, but, just like the children in school collaborating to produce structures in *Minecraft*, there are many opportunities for social interaction. This misconception probably started with the video game nerds in the 1970s and 1980s when the market for video games was in its infancy. Today, video games are a huge market that many people are involved with. According to Pew Research Center, 84% of boys ages 13-17 plays video games and 59% of girls.²² In fact, video games today encourage being social. 60% of frequent gamers play with friends, 33% with siblings, and 25% with spouses or parents.²³ Many games today are designed for players to play cooperatively, with multiple players, or online. Games like *Battlefield One* or *Destiny* require players to get involved with others. In *Battlefield One* there are 64-player online matches in which teams of 32 players must work together to defeat the other team. In *Destiny* to complete raids individuals must team up with other players. Solving the puzzles and defeating the bosses are impossible to do by oneself, and a microphone to communicate with your teammates is almost mandatory to succeed. The video game environment today is much different than it was 20 years ago when there was

no internet. Sociologist Talmadge Wright has observed online communities interact and noted that while people are playing video games, they are also engaging in meta-gaming which is conversation about the content. This offers interesting instances in which individuals discuss rules and rule-breaking while also dealing with the conflict on screen as people cooperate and improve comradeship off-screen.²⁴ Video games can actually help develop social skills and collaboration, especially for introverted individuals who may become stressed in other social situations.²⁵ In 2012, Penn State researchers surveyed 166 people standing in line waiting for the midnight release of *Call of Duty: Black Ops*. The average for the participants was 20.5 hours per week spent playing video games and more than \$200 spent a year. They discovered that many individuals had developed bonds with others through playing video games and that even hardcore gamers who spent more than 100 hours a week playing video games weren't necessarily troubled when it came to being social.²⁶ In my own life, video games are like a social glue for my friends and me. It is a common interest we share and something that always manages to bring us back together. For many people today, that is probably a similar case. The studies seem to show that video games do not make people less social, but they are an escape for individuals who are naturally less social and simultaneously offers them a way to develop their social skills.

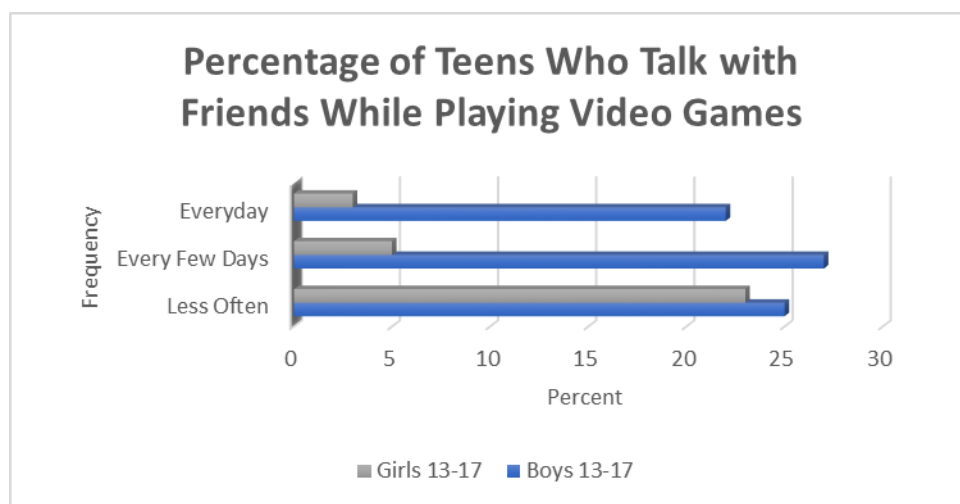


Figure 6 - Data from Pew Research Center, "Teens, Technology and Friendships"

There are No Careers in Video Games

Video games offer more opportunities than just developing your mind or social skills, but they offer new opportunities for jobs and livelihoods. There are many careers for individuals involving video games. There are composers to write the soundtracks, developers, individuals tasked with marketing, journalists and writers, testers, voice actors, and many other professions involved with developing video games.²⁷ Without all of these individuals working together to produce games, we would not have the products we have today. For example, Sir Paul McCartney helped compose the music for Bungie's 2014 game *Destiny*. The video game industry is very similar to the film industry. Even the video game industry uses motion capture technology now, and developers and producers need to hire people who have the ability to harness that technology. There are even jobs for those who just want to play the games, albeit you need to be skilled at them. In 2016, there was \$92 million in prize money through electronic sports tournaments.²⁸ Many countries have now gone to new lengths by officially considering video gaming a sport. Only about 500 players made more than \$30,000 in tournament prize money, but more money than just prize money is circulating through the market.²⁹ There are sponsorships, donations, advertisements, and various other means for players to earn money. Sometimes companies send professional players or streamers new computers or even new games for them to play for their audience. One professional player for *Counter-Strike: Global Offensive*, Christopher "GeT_RiGhT" Alesund, who plays for Sweden's Ninjas in Pyjamas has made over \$1 million in tournament prize money since 2008 and he also earns money through sponsorships.³⁰ The World Electronic Sports Games 2016 Grand Finals, which was completed in January 2017, had a prize pool of \$1.5 million with \$800,000 going to the winning team.³¹ The fact is, there are many careers and jobs that are involved with video games and the market is growing rapidly. People have become millionaires just by playing video games and enjoying what they may consider as a hobby, and the market is still rapidly growing. The tournament

prize money for eSports rose from \$66 million in 2015 to \$94.6 million in 2016.³² The future of the video game market looks exceedingly bright for those who wish to become involved and make a career in the video game industry.

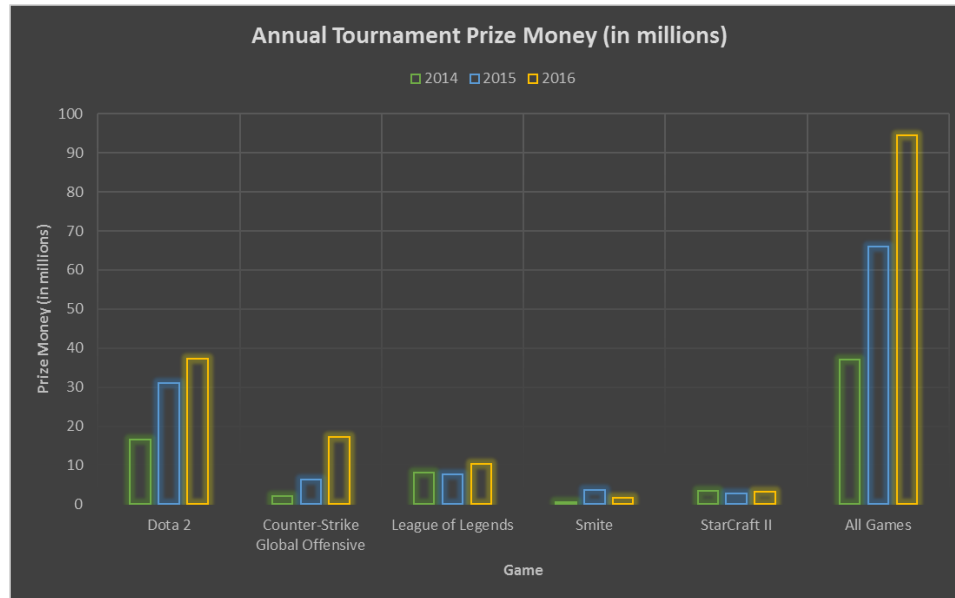


Figure 7 - Data from E-Sports Earnings, History 2014, 2015, 2016

Developing Games is Simple

Professional video game players are not the only ones to have it rough sometimes. While the video game industry is rapidly growing, there are many issues and misconceptions that plague developers and other individuals that design video games for our amusement. The first two misconceptions almost go hand-in-hand; that game developers are lazy and developing games is easy. In reality, the opposite is true. In the game development world, a common issue is the video game crunch in which developers and other individuals work long hours. One woman, Jessica Chavez, who wrote and edited text for the game *Legend of Heroes: Trails in the Sky*, worked 80-hour work weeks for 9 months straight.³³ This problem has become a common thing in the game development environment. The “Crunch” has destroyed marriages and the passion that people in the industry have for video games. Often all the overtime is unpaid because the employees building the games are salaried. One game

designer, Erin Hoffman, wrote an exposé in 2004 exposing the practices of Electronic Arts (EA). She claimed their practices were unethical, illegal, and harmful. After a storm of class-actions lawsuits, EA settled for tens of millions but nothing has changed. Developers are still expected to crunch for deadlines that were unwisely set; forcing them to sleep at the office, lose friendships, and go crazy. Developers and others work extremely hard to produce the content that we play.³⁴ Another misconception is the sale of downloadable content (DLC) is merely about greed. Many gamers feel the games they are given are being offered uncomplete and extra content through DLC is just there for companies to make more money. However, DLC helps developers from having to carry through on massive layoffs that are common in the industry. It offers them a reason to keep their employees employed until the next big project comes along, although it is true publishers make a good bit of money from DLC. Another common perception is realistic graphics and framerate-per-second are the most important elements for a video game to have. There are many different artforms that are used throughout video games which separate them from other products. Just because a game goes for a realistic feel does not make it better than every other game. There are great atmospheric games such as *Ori and the Blind Forest* or fantasy games like *Final Fantasy* which do not try and be realistic. That doesn't make the game worse. An additional misconception in the gaming community is fixing bugs is easy and just because a bug arises means the game is crap. The situations in which bugs arise are often hard to come by. Some people can play a game for a thousand hours and never experience a bug, but someone else might in the first ten minutes. According to developer Dan Tsukasa,

Players completely overlook that a bug requires a very very specific set of circumstances to be met in order to crop up. Sure it might appear, but it only appears if you have X number of items, Y amount of ammo, have killed exactly 20 soldiers all before the game's timer hits 12:01 and 0.003 milliseconds - that's when the bug crops up, in that seemingly random circumstance.³⁵

Fixing the bugs takes time as well. Developers must find where the coding went wrong among thousands of lines of code and at the same time try to avoid creating new bugs, so gamers should not expect bugs to be fixed the day they send in a complaint. Finally, there are more jobs in game development than just programmers and coders. Like stated in the previous section; there are writers, producers, testers, and many other roles. People do not have to go to college to become a programmer so they can make video games, nor do they have to love playing video games and be good at them as a requirement to make them. Anyone can try and get a job making video games.³⁶

In Conclusion

For many years video games have been plagued by the perspectives they were damaging to our society, and particularly to young children who are growing up. Many people have believed for so long that video games make individuals more violent or less sensitive to it, they make us dumb and anti-social, and anyone playing video games was just wasting time they could have been using productively. However, these notions and perspectives are largely untrue in comparison to the realities that studies and research are showing us today. Video games only have a casual correlation with violence and even though children are playing more video games, violent crimes perpetrated by 12- to 17-year-olds have fallen. Further, as researchers are performing more studies, we are learning that video games may be beneficial to your mind and serve as a place for less social individuals to be comfortable. Even the perceptions that mainly boys play video games, video games cannot be a career, and various views on game development are being challenged today. Video games are a place for everyone to enjoy themselves, live their lives around, and bring joy and entertainment to others. It is time as a society that we move behind our perceptions of the past and look at the new information coming to light. Video games are a great form of entertainment and more people should give playing them a chance. You may get more out of it than you could ever imagine.

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