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# Link between Video Games and Violence

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## Abstract

With video games becoming increasingly popular, more and more children are exposed to gaming at a younger age. With the violent nature of some video games comes the age old question; how does video games influence and impact our society. Without a doubt video games have played a role in our society but are video games really the ones to blame?

## Introduction

Video games have come a long way ever since the 80s with the introduction of Pacman and Frogger. Video games are enjoyed by players of all ages nowadays with parents of the younger audience trying to ensure the games played are appropriate for their age. Thanks to big companies such as Ubisoft and Activision, many new games are released yearly for players of all ages to play and enjoy. With the large amount of time spent playing video games everyday by some, some may question the effects prolonged gaming may have on the human mind. There have been fatalities related to video games due to the amount of time spent online without food or sleep. In situations like this, are video games the ones to blame or is there more to this?

The first topic that I will be addressing is the differentiation between video games. With the thousands of games on the market, which are the ones that everyone is so concerned about? Video games from different

genres have a different impact on an individual and sometimes it may in fact educate the player without them realizing it. Educational games such as these are usually not in the line of fire of the media.

The next topic explored will be the social aspect of video games. Prolonged periods of time spent playing games would mean less time spent with friends or family. The lack of social interaction would likely affect their ability to create and hold relationships and because of such reasons, they will often prefer to retreat to their virtual world where players alike are plentiful. This is one of many reasons why people find games so attractive and prefer it to real life interactions.

The third topic that I will be addressing is the addictive quality of video games. Many problems that arise from video games typically being with prolonged hours of gaming and there are times where this has even resulted in death. An example of this could be the death of a Taiwanese teenage who collapsed and died after playing online for 40 hours straight. This is not the first and certainly not the last case of this nature. With the amount of people playing video games, the dangers of game addiction is a prominent problem. For example in South Korea, video gaming licenses are issued to pro gamers. This gives south koreans an incentive to game even harder if the chance of obtaining a pro gaming license was on the line.

Another controversial topic about video games is the effects it plays on our minds. If a video game is filled with violent and mature content, does this cause the player to also think and behave in that manner? There was a recent event where a man went on a spree re-enacting GTA in real life. Without a doubt this event happened due to the effects of video games but is this a fair argument for millions of other gamers out there. If the argument of violent video games cause violent people could the same be said for educational games resulting in smarter individuals?

Another issue that will be discussed is the effects of extended periods of time gaming. What are some of the effects on the human body with prolonged periods of time without stretching or moving. A common setting for many gamers is a dimly lit room in front of either a tv screen or a computer monitor sitting in

either a couch or a chair. What are the detrimental effects on our bodies when we stare at a screen for such a long time or when we stay in the same position for extended periods of time. The death mention above was due to long hours sitting in a sedentary position that resulted in cardiovascular problems.

## **Video game distinction**

There are hundreds of thousands of different video game titles on the market today, ranging from simple flash games to triple A production games, and a number of those produced are video games are educational. Games that are considered educational are video games that provide educational value to the player and these games are often intertwined with other game genres. This often results in a game whose primary focus is to provide entertainment value but at the same time educates the players. Examples of such games are strategy games such as SimCity where the player is tasked with founding and developing a city, while taking into consideration the happiness of the citizen and keeping within budget. That is the primary focus of the game but at the same time teaches the players social and practical economic processes that are involved in city managements as the games goes into great detail.

On the other hand, a larger part of the market consist of video games that contain a large amount of violence, games such as Call of Duty or Grand Theft Auto. The military shooter and chaotic open world nature of each games are both extremely popular and extremely violent by nature. The two involve the use of different variety of weapons and engage the player in shooting up enemies of sometime civilians alike. Games comparable to these are often the reason why videogames are associated with causing violent tendencies in the players.

## Social Impact

With large amounts of time spent playing video games, you give up the opportunity to do many other things such as spending time with friends. Those addicted to playing video games often find it hard to maintaining personal relationships. Online games very often require a players undivided attention and lack the ability to pause mid game and due to this even a simple phone call proves difficult to answer. Video games can become the number one priority in some people's lives and when not gaming they have it constantly on their mind. Some of them only feel like talking about their game, often that those around them probably no longer wish to be near them anymore. The inability to engage or hold a proper conversation goes to further detriment relationships.

The lack of social interaction caused by obsessive gaming can have unfavorable effects on social skills. The social awkwardness created by the isolation of their gaming addiction continues to feed their addiction. With no relationships to look forward too in the real world, they will return back to the online world where relationships are easier to create and waiting for them. Games such as World of Warcraft have millions of users where online communities and regular social interactions with fellow gamers are a norm. Some games are centered around violence but even then, they often require teamwork and communication amongst team members. Unlike real world interactions, these fellow players understand and can relate with you. Relationships are easy to create in settings such and those, you have a common interest and are working together towards a mutual objective.

## Addictive Quality

Video games are becoming extremely complex and detailed and growing to cater to a larger audience of players. The graphics and strategic values are constantly improved and to top it off the online multiplayer of many games make it easy to understand why some people choose to play video games over hanging out with friends or watching TV. Playing games online allow for the players to adopt a new persona behind the

screen and for those who often feel powerless in real life suddenly gain the ability to be a super soldier or command armies in a virtual world. Everyone has had thoughts of a violent nature at one point or another and the ability to wreak havoc in a virtual world with no real life consequences can be thrilling and exciting.

The fact that videogames are made to be addictive does not help those who get addicted easily. Game designers are always trying to make their games more interesting and fun to make people spend more time playing them. Hooks in games are built in to give players a small satisfaction each time they start up that game. Things such as getting the highest score, completing quest, exploration or even leveling up are all mini accomplishments that add to a players experience each time they play. There are also Massive Multiplayer Online Role-Playing Games which are designed to be played together with thousands of others online in a never ending game. Teens who are easily bored or have trouble making friends will often be drawn towards video games as they can find the means to satisfy needs that can't find elsewhere.

Video game addiction is becoming a real concern and despite its negative image it is still promoted and encouraged. In addition to the satisfaction and confidence many gain from video games, some play for the glory and for money. Tournaments such as Dota 2 Internationals or League of Legends Championship who boast prize pools in the millions, \$10.9 million for Dota 2 International 2014, it is easy to see why people play for such extended periods of time. Those who feel they are good at playing strive to improve their skills as much as they can in order to earn themselves a spot in the championships. With E-Sports becoming ever so popular, the dream of every teenager to play video games for a living is becoming a reality. Even if a game itself is not addicting, the motivation behind winning a tournament would be enough for one to spend all their time playing games.

The level of publicity certain professional gamers have is troubling and can be seen to encourage playing video games even more. Professional gamers in South Korea are often virtually idolized and treated like celebrities, in fact matches are televised on cabled sometimes. These pro gamers often attract large sponsorships allowing for them to make more than \$100,000 a year in addition to tournament prizes. South Korea's

infatuation with video games have caused the Korean government to accepted video game addiction as a threat to the health and safety of player. Due to multiple incidents, involving extended periods of gaming, they have imposed a “Cinderella Law”[17], blocking those under 16 from accessing gaming websites after midnight. To enforce this, minors are required to register their national identification cards online to allow the government to monitor and regulate gaming useage. In addition to this law, there are also many publicly funded treatment centers and to help game addicts.

## Long Term

One of the most popular video games sold is the Call of Duty series where a player takes on the role of a soldier and sent to defeat enemies with a variety of guns. With the amount of violence found in this first person shooter, there are concerns for the mental effects on those who play this game a lot. One of issues raised about this is that those games is that it is not a passive game, the players are the aggressor and are the ones commit the violent acts. Another issue that adds onto the concern is that rather than being punished for violent acts, like in the real world, the player is encouraged and rewarded for killing. This active participation and reward scheme affects a persons thoughts and may skew one’s perception of violence and the subsequent consequences.

Studies have shown that short term effects of playing violent video games do affect a player. Despite it being a game your mind is still in the moment and need to make critical decision to help you survive in the game. This causes your body to dump stress hormones, such as noradrenaline and testosterone, into the bloodstream. In other words, an adrenaline rush. This surge of adrenaline is only temporary and do not contribute to long term effects. In fact, there have been no conclusive studies on long term effects of violent video games and this topic is still fiercely debated.

There are many factors to people with violent tendencies and violent video games can not the only cause. Negative effects are present for those who play violent video games but this does not necessarily mean it will

make people go on rampages on the streets. Games are a situational environment and gamers often are able to differentiate what can be done in a game and what cannot. People have pointed fingers at video games for school shootings and this is not a fair argument. For example the killers at Columbine high school, they were bullied and had psychiatric illnesses to begin with. Video games cannot be the sole cause for their actions. Anyone with a sound mind would not be affected by a violent video game.

## Cognitive

Without a doubt, playing video games for long periods of times must at least have had some sort of effects on the players. A few studies have shown that those who often play video games actually have a cognitive edge over those who do not. Playing games often trigger our brains Prefrontal Cortex where decision making and self control take place in our brain. Complex decisions such as weighing options between obtaining short term objectives and long term ramifications are processed there. Also the Frontal Eye Field is engaged when gaming, where visual motor information and judgments for external stimulations, commonly know for hand eye coordination. A person with a well developed Prefrontal Cortex and FEF will theoretically be better at multitasking and decision making.

Games require a large variety of skills and they all challenge and improve a players ability. Quick thinking, fast analysis and decisions making are common parts to a video game and gives the brain a workout. Tests between gamers and non gamers have shown that an improvement of visual perception in gamers. They are able to see detail in cluttered visual environment or faster reactions without loss of accuracy. First person shooter players are efficient in collecting visual and audio information when playing games and are often required to make decisions based on the information, a process called probabilistic inference. Many skills obtained from gaming can be translated to real world usage.

A popular term in video games is “grinding”, which refers to any repetitive activity that is not fun but performed solely for the purpose of obtaining a resulting reward. This helps build patience and perseverance,



a real life skill, which can come in handy getting yourself through homework or working a day job. Another skill spawned from puzzle and strategy games like Starcraft II or Civilization V help build forward thinking and strategic planning. Skills such as these can help an individual in planning income or lay out future plans. Thinking a few steps ahead allow for them to consider potential consequences in their plans. Decisions are never easy to make and the brain is always weighing the probabilities of each decision, video game players are able to acquire information faster than non gamers to help make a binary decision.

## Physical

With the long hours spent playing games no matter the platform, there are undoubtable some detrimental effects that take their toll on a player's body. The prolonged hours spent staring at a static screen, vision problems are often an issue associated with video games [9]. Our eyes, specifically the cornea, pupil and iris are not intended for long viewing sessions of electronic screens. The intense concentration required from video games put strain on our eyes and cause that individual to be more susceptible to migraines.

In addition to this and many other problems, sleeping disorders or even lack of sleep altogether is another major issue. Sleep disturbances caused by over stimulation of the brain thinking about the game, or irregular sleep patterns. In extreme situations, there have been multiple cases where an individual has died due to various video game related incidents. An example of such an incident is a teenager in Taiwan who passed away after playing Diablo III for 40 hours in an internet cafe [13]. Failing to eat or sleep during his marathon game session, he suffered a fatal blood clot due to spending so much time seated. Symptoms varies between each case such as heart failure to simply passing out from exhaustion. The one similarity between them all is the neglect to eat and sleep in order to maximize game time, which often add up to many hours and in some cases days of non stop playing.

## Conclusion

Contrary to popular beliefs, video games can actually help improve ones abilities both physically and mentally. In a wide variety of test preformed between those who regularly play video games and those who do not, those who regularly play scored higher in skills related to cognitive skills such as spatial navigation, visual perception and strategic planning depending on what genre of games they play. The more passionate the individual was to a genre of game, they more pronounced the results were. Playing video games could even possibly improve visual disorders such as amblyopia , "lazy eye", by patching the dominate eye to strengthen the weaker eye. After playing video games for a length of time, significant improvements could be seen.

When it comes to video games, like many things in life, moderation is key. Anything done in large quantities will definitely have detrimental effects and knowing when to take a break is important. Common assumptions about the negative effects about video games are often misguided and potentially wrong. Violent video games will in fact influence thoughts and feelings of a player but are usually passive or short term due to their adrenaline rush. The real world behaviours of these effects are substantially milder than the media often portrays it to be. Those who have acted out due to video game often have mental illnesses or physiological problems to begin with and video games can not be the sole factor to put the blame on. If video games did in fact cause everyday players to be more violent, there would be many more cases on this topic with hundreds of millions of people playing violent video games. Social skills are important in every day life and is a skill that must be practiced in order to manifest them to a socially acceptable level. If we spend too much time playing video games, we lose time to engage in other aspects in life.

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