
VIOLENCE AND DIGITAL GAMES

FACTS BEYOND MYTHS

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Abstract

The impact of violence presented in media on the behaviour of media content recipients has been probably the most frequent subject of research studies since the very beginning of systematic research of media themselves. Intensity of this research used to increase with each new-coming medium and takes longer depending on the complexity of its character. Digital games are not an exception. Due to the fact they basically include all previous media extended by interactive interface, research regarding the impact of violence presented within them is more complicated. Presented study critically analyses relation between violence and digital games across research topic history with the aim to explain a comprehensive discourse and separate facts from myths.

Keywords: digital games, violence, media effects, immersion

1. Introduction - the relation between digital games and violence

The largest amount of the research already done has been dedicated to media effects, first ones dating back to beginning of 20th century, for example The Payne Fund Studies made between 1929 and 1932 [1]. Research of mass media has been always characterized by the interest and intent to capture potentially negative or even destructive influence on mass media audience [2]. There are many examples of their potential impact in media history. Increasing number of suicides after releasing Goethe's *The Sorrows of Young Werther* in 1774, public panic after radio broadcasting of Wells' *The War of Worlds* in 1938 and countless effects possibly caused by television that had been a main object of research for many years [3]. Lowery and DeFleur summarized the main conclusions of a research carried out in the USA: television content is heavily saturated with violence; children and adults are spending more time exposed to violent content; and the viewing of violent entertainment increases the likelihood of aggressive behaviour [4]. Also, the repeated exposure to violent content leads to insensibility and higher tolerance to violence content. So far more than 6 000 research outcomes have been focused on violence in media. Research paradigm has gradually changed from the assumption of direct causality through the theory

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of weak effects and long-term impact up to the concept of strong effects involving the power of the audience [2, p. 24-25].

Amount and frequency of research directly focused on impact of violence in media is increasing with each new-coming medium, digital games not being an exception. As a medium including text, photography, sound and video, thus all the previous existing media types, it has brought a new dimension to this issue. Within digital games, recipients are not just receiving a displayed violent content, but they are able to virtually participate on violence, initiate it and even experience it, what seems to be even more dangerous (especially for children) than television oversaturated with violent content. Digital games have got more significant attention about possible negative effects of their violent content since 1992 with the arrival of games like *Mortal Kombat* (Midway Games, 1992) and *Night Trap* (Digital Picture, 1992) bringing gore (a synonym for the brutal, explicit and realistic graphic violence portrayed in visual media) to digital gaming. The possibility of being a part of an interactive virtual violence presented with an excessive explicitness of blood effects caused public indignation that quickly got up to governmental level.

United States Senate hearings on digital games violence officially began on December 9, 1993 [5]. Ironically, on December 10, 1993 id Software released *Doom* (id Software, 1993), an icon within violent games. The result of hearing led to a creation of the *Entertainment Software Rating Board (ESRB)* [5, p. 608]. The age and content rating system provides guidance to consumers (particularly parents) during their buying decisions. The gore itself could not be banned obviously due to one reason – the profit from these games is considerable (6.5 million *Mortal Kombat* cartridges sold) [5, p. 466]. Increased attention and sensitivity to violence in digital games was a side effect of this hearing subsequently strengthened by incidents around the world in next years with a tendency towards moral panic and calls for an extensive research regarding the impact of violence in digital games. Media themselves has got much responsibility for this situation due to emphasizing any connections of violent acts with digital games.

2. The ‘guilt’ of digital games

One of the very first incidents happened in 1997. Thirteen-years-old Noah Wilson died when his friend stabbed him in the chest with a kitchen knife the same way his favourite *Mortal Kombat 3* (Midway Games, 1995) character *Cyrax* kills his opponents in game – grabbing them around the neck in a ‘headlock’ and stabbing them in the chest. Noah’s mother sued Midway Games, Inc. alleging that at the time Noah’s friend was addicted and obsessed with the game in a way he actually believed he was the character *Cyrax* [*Wilson v. Midway Games, Inc.*, http://www.leagle.com/decision/2002365198FSupp2d167_1347/WILSON%20v.%20MIDWAY%20GAMES,%20INC]. Interesting fact is that stated method of killing has never belonged to *Cyrax*’s finishing moves, so called *fatalities* [*Cyrax*, <http://mortalkombat.wikia.com/wiki/Cyrax>].

Besides several individual incidents, especially mass crimes got the most attention. In 1999, both underage Eric Harris and Dylan Klebold killed 12 classmates and a teacher and injured 21 other people before killing themselves during Columbine High School massacre in Colorado. Despite the findings that they apparently hated jocks, admired Nazis and scorned normalcy, according to their social life, the public was interested only in the fact that they used to play *Doom* and Harris even created a couple of new levels which he distributed via Internet, but with no direct connection to the up-coming tragedy [P. Duggan, M. D. Shear and M. Fischer, *Killers Fused Violent Fantasy, Reality*, <http://www.washingtonpost.com/archive/politics/1999/04/22/killers-fused-violent-fantasy-reality/43e3243b-89d1-40b4-aac2-9d5033013ff2/>]. In this case, design of Harris' *Doom* levels more likely expressed his need for releasing anger and rage at least in form of virtual violence, what might indicate a mental problem.

In 2008, 18-years-old high school student murdered a taxi driver in Thailand to gain money for playing his favourite game *Grand Theft Auto IV* (Rockstar North, 2008) (GTA). He stabbed the taxi driver to death like he used to act in game, because according to Bangkok police captain, he wanted to find out if it was as easy in real life as in the game [J. Reed, *Thailand bans Grand Theft Auto IV*, http://news.bbc.co.uk/newsbeat/hi/technology/newsid_7540000/7540623.stm]. Since this incident, all GTA series games have been banned in Thailand. GTA games which are perceived as a synonym for violent digital games are often in some way involved in various crimes ranging from robberies to murders. Paradoxically throughout the history of the series only insignificant number of such violent events has been recorded compared to the enormous amount of GTA players. Last title of series *Grand Theft Auto V* (Rockstar North, 2013) became only three days after its release in 2013 the fastest selling entertainment product in history [6].

In 2011, Anders Breivik killed 77 people – 8 by detonating a car bomb in Oslo and then he shot 69 teenagers at a political youth camp on the island of Utøya. During interrogation he admitted he 'trained' for the attacks playing digital game *Call of Duty: Modern Warfare 2* (Infinity Ward, 2009), especially its feature a holographic aiming device. He also spent a lot of time by playing *World of Warcraft* (Blizzard Entertainment, 2008), but any connection between attacks and this game has not been proven [*Anders Breivik 'trained' for shooting attacks by playing Call of Duty*, <http://www.theguardian.com/world/2012/apr/19/anders-breivik-call-of-duty/>]. Neither *Call of Duty* was considered as an official reason of his act.

Trend that digital games have been involved or considered as a reason of violent behaviour culminated in 2012 with Sandy Hook Elementary School shooting in Newtown, Connecticut, when a 24 years-old Ryan Lanza shot to death 20 children and 6 adults. People reacted to this tragedy by searching for clues of his motives throughout his Facebook profile. A mob of angry Facebook users noticed that Ryan had liked *Mass Effect 3* (BioWare, 2012) and subsequently a Fox News expert blamed digital game for the horrific shooting with no obvious evidence of connection between killing and a game. This

triggered a witch hunt in which *Mass Effect* became a scapegoat [B. Ashcraft, *Mob Blames Mass Effect For School Shooting, Is Embarrassingly Wrong*, <http://kotaku.com/5968683/mob-blames-mass-effect-for-school-shooting-is-embarrasingly-wrong/>]. In January 2013, U.S. President Barack Obama said that “Congress should fund research on the effects violent video games have on young minds” and promised 10 million USD to support this kind of research. This could be considered as one of the most significant moments in digital game history, because no president before had taken formal, political steps to study any purported link between violent digital games and real-life violence. It is important to note that aforementioned research has never been carried out [M. Rose, *Video games and gun violence: A year after Sandy Hook*, http://www.gamasutra.com/view/feature/210322/video_games_and_gun_violence_a_.php/]. According to Tassi, such research would probably come to the same conclusions the other similar studies have reached [P. Tassi, *Obama Calls for Government Funded Research Into Violent Video Games*, <http://www.forbes.com/sites/insertcoi/2013/01/16/obama-calls-for-government-funded-research-into-violent-video-games/#644a842763fc/>]. Some have shown links between violent digital games and aggression [7], others have shown no connections while none of them could certainly confirm that playing digital games leads to violence in real life [8].

Nevertheless, Ferguson et al. published in 2015 a study focused on connection between violence presented in media and real social violence. One part of the study also dealt with digital games. Results of their study claimed that in last 15 years the violent digital game consumption in society was inversely related to societal youth violence (Figure 1) [9].

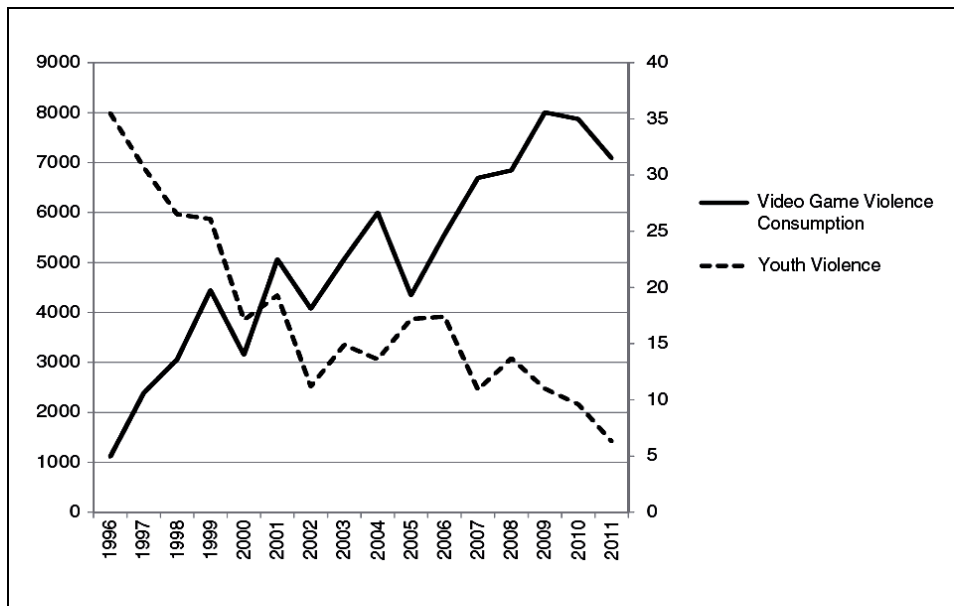


Figure 1. Relation between digital game violence consumption and youth violence [9, p. E12].

Results of Ferguson et al. may refer to the opinion that watching/playing violent content might have a positive effect, *catharsis*. In this case it means releasing or ventilating accumulated aggression [10, 11]. Gentile stated four requirements for catharsis: the plot must be constructed according to very specific rules; two critical emotions both must be aroused, fear and pity; it is critical how the ‘tragic pleasure’ of fear and pity are aroused (e.g. the conflict should arise between friends rather than among enemies); the characters must be of a certain type to get the right kind of response in order to achieve catharsis [11]. Although digital games are able to meet all these requirements, there is a lack of empirical support to definitely state an extent of possible catharsis from playing violent digital games. Additionally, other effect – the violence promotion impact – associated with repetitive playing of such games, may simultaneously or subsequently counteract the cathartic effect. This conclusion points again to the individual differences and influence of other factors (education, level of parental guidance, consumption of other media content, etc.) [12-14] rather than to the general negative impact of violent content of digital games.

3. Factor of gamer’s will

“When violence is the primary gameplay mechanic, and therefore the primary way that the player engages with the game world, it severely limits the options for solving problem. The player is then forced to use violence to deal with almost all situations, because it is the only meaningful mechanic available” [Damsel in Distress: Part 2 – Tropes vs Women in Video Games, https://www.youtube.com/watch?v=toa_vH6xGqs&feature=youtu.be]. Except games like *Mortal Kombat*, the displaying and performing violence in digital games often implicitly as well as explicitly depends on gamers themselves, especially on their will. Many games contain the possibility to control level of violence within main game menu, so gamer can turn off bloody or gore effects even before starting a game. Other violence controls may be implemented directly into the gameplay. For example, in *Fallout 4* 9 (Bethesda Game Studios, 2015) perk (an obtainable permanent bonus associated with Fallout series available always after gaining new experience level) called *Bloody Mess* is able to make enemies explode. The number of selected perks is limited to the maximum level of hero, however, much more perks are available, thus gamer chooses perk *Bloody Mess* at the expense of a more practical advantage.

In games, gamer can make decisions, in other words more gameplay mechanics are available to use, higher rate of violence is his choice. Motivation for using violent acts is strong particularly because rewarding violence is very common in game – a glorification for rapid amount of kills in row, shooting into the head of the enemy, extra points for using a special violent finishing of a fight, trophies/achievements for certain amount of kills by specific way, etc. The extreme case is *Duke Nukem Forever* (3D Realms et al., 2011) in which gamer’s live (called *Ego boost*) is increased after humiliating enemies by means of

boxing the crotch, among other violent actions and sexual interactions. Although *Duke Nukem* series has been always based on violence, *Duke Nukem Forever* brought almost intolerable level of violence even beyond what gamers considered as 'cool' in 1996. Fans themselves felt that something was wrong and this perception was reflected in the commercial failure of this title.

On the other side, many games punish players for a groundless and meaningless violence. For example sucking blood of innocent humans to their death within *Vampire: The Masquerade – Bloodlines* (Troika Games, 2004) causes losing a part of gamer's hero humanity and turning him into a beast.

There are examples of beating a game without violence. One of the latest and most shocking cases occurred in 2015 when gamer Todd Howard overcame an extensive, complex and complicated role-play game *Fallout 4* without killing anyone, what even game developers had not considered to be possible [P. Hernandez, *Guy Beats Fallout 4 Without Killing Anyone, Nearly Breaks The Game*, <http://kotaku.com/guy-beats-fallout-4-without-killing-anyone-nearly-brea-1749882569>]. Such game progress requires time and patience, which most players are not willing to invest.

Up to this point, the study has dealt with a presumption that content represented in digital games is comparable to content presented in other media like television. Nonetheless, according to Aarseth's theory of *cybertext* [15] game should not be interpreted like a linear text, it can be also configured via *ergodic* user functions. Simply said, this approach takes into account the interactivity of games absenting in other media types. Thus the question is to what extent it is generally possible to consider violence in digital games as violence.

4. This is not violence

One of the most famous paintings by René Magritte presents image of a pipe with a contradictory text *This is not a pipe* underneath. The painting is just an image of a pipe, not the real object. Like in the painting itself, Foucault doubts the principle of imitation and emphasizes the idea that Magritte painting supports the principle of image without external pattern, thus there is nothing beyond it to imitate [16]. As in the case of the work of art, deeper insight to violence in digital games is necessary as well. There is a fundamental question: what is possible to consider as a display of violence or violence in games as such? As mentioned above, digital games have got more significant attention about possible negative effects of their violent content with the arrival of more realistic games; therefore realism of a game is an important factor to discuss within this topic. Additionally, the majority of current games are characterized by photorealistic quality, including violence presented.

Steam discussion about *The Witcher's* (CD Project Red, 2007) side-quest *The Dogcatcher of Vizima* is a very interesting example of attitudes towards violence in games through the scope of realism. The quest objective is formulated as follows: *I will pay for the elimination of stray dogs. Deliver six pots of dog*

tallow as proof of completing the task. In fact, the real task is to collect 6 pots of dog tallow and bring them to a gravedigger.



Figure 2. A part of Steam discussion about The Witcher's side-quest The Dogcatcher of Vizima.

Killing dogs is not an indispensability for the completion of this quest. There are many other ways how to gain necessary items (e.g. browsing houses or some corps) but killing dogs is the easiest one. A problem also discussed within

Steam forum on this side-quest (Figure 2) [*Dog Tallow*, <https://steamcommunity.com/app/20900/discussions/0/558749190910545372/>] is a decision whether to hurt innocent animals. In the game, all attackable characters are portrayed as enemies. Stray dogs in town are not enemies until game hero is attacking them. First argument of this discussion is “No, I don’t like hurting animals, even if it’s just a game” and second argument regarding killing human characters is “It’s different, people killed in the game wants to kill me, and defend themselves, dogs are the contrary”. Thus the question is whether killing virtual pets differ from killing virtual people. Not from the view of this particular game. Humans and dogs are both in-game characters just with different appearances and roles within the game. The difference lies in the link between realism and life experiences of gamers. In this mission, player’s approach varies depending on the degree of immersion they are willing to accept. Several studies proved a relation between immersion and visual [17] and audial realism of the game [18]. According to Krčmar, Farrar and McGloin, realism in digital games increases the immersion that can lead to significant effects like an increase of aggression [19], although it does not confirm the hypothesis that aggression will manifest automatically also in real life situations.

Emotional response, according to Solarski, has been often associated with the level of gamer experience. Experienced players are dealing with the testing of game’s rule system, while casual gamers after dead of their character use words like ‘ouch’ [20].

Based on the case of *The Witcher’s* side-quest *The Dogcatcher of Vizima*, it is possible to define two levels of relation between violence and realistic digital games: 1.) gamers rationalize general usage of violence in game, because they understand, it’s just a game, i.e. visually represented system of rules, no matter the realism of representation; 2.) realism prevents violent acts of gamers even though they understand it’s just a game, thus they have to rationalize every single violent action, e.g. a character is marked as an enemy and no other interaction is possible.

There is another current trend that is in contradiction to the relevance of the relation between photorealism and violence in games, specifically a return to pixel graphics. The most representative example of successful modern pixel digital game is *Minecraft* (Mojang, 2011). But is world of *Minecraft* composed of small cubes (3D pixels) displaying violence? It refers back to first digital games presented to gamers in form of clusters of pixels representing objects and enabling a whole gameplay within such environment. Game experience was actually tied with gamer’s life experiences, thus his ability to associate shapes and colours with real-life entities. The gamer who plays *Space Invaders* (Taito, 1978) without a knowledge space or sci-fi genre just tries to beat the visually represented system of rules, no matter the realism of representation, by preventing unidentified pixel shapes to reach him. He does not perceive a story of a violent space battle held in order to save the Earth. Perception of any game is very individual. For example, chess as a digital game is a strategic game set in abstract world in which gamer moves tokens with aim to capture rival's king.

But gamer could also imagine a medieval battle full of blood and violence while playing.

5. Conclusions

Research directly focused on impact of violence in media used to intensify with each new-coming medium. Digital games have brought the opportunity to virtually participate on violence, initiate it and even experience it. Question about violence in games has got more attention since they have included a gore. In past, digital games were presumably in some way involved in many violent incidents, what led to a general conviction about the negative impact of violent content in digital games and neglection of individual pathology and influence of other important factors (education, level of parental guidance, consumption of other media content, etc.). Research results concerning this issue vary, none of them have been able to certainly confirm that playing digital games leads to violence in real life although Fergusson's study shows that in last 15 years the violent digital game consumption in society was inversely related to societal youth violence [9].

Due to the fact that digital games have gained more attention regarding possible negative effects of their violent content with the arrival of more realistic games, one of the main aims of this critical analysis was an investigation of the relation between realism of a game and violence, respectively of what is possible to consider as a violent display or violence in game as such. Analysis of Steam discussion about The Witcher's side-quest The Dogcatcher of Vizima brought following findings: 1) gamers rationalize general usage of violence in game because they understand it's just a game, i.e. visually represented system of rules, no matter the realism of representation; 2) realism prevents the usage of violence by gamers even though they understand it's just a game, thus they have to rationalize every violent action, e.g. the character is marked as an enemy and no other interaction is therefore possible.

To conclude, it is not appropriate to assess effects of all digital games as a whole because the perception of violence in them may depend not only on realism of a game, but also on a level of immersion during gameplay, gamer's will, his life experiences and game experiences as well. Although the question remains, how relevant is research focused on the effects of violence in digital games, when it is difficult to define exactly what violence in games actually is? Respectively, when it depends on many individual factors changing with each gamer. It is important for this issue to become an object of more profound research, particularly because of current era when according to market trends the most popular video games are also the most violent ones.

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