Violent Video Games and their Influence on Society

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Abstract

Video games are a popular free time activity and deeply rooted in our modern society. At the same time, video games have been the source for arguments between the media and scientific communities for several decades now. Especially violent video games have been thoroughly analyzed and discussed by media and scientists alike. This paper defends that many of the raised concerns are inconsistent and exaggerated, while positive effects of said games are overlooked. It is argued that video games are at risk to become a modern scapegoat, if the general debate on video games isn't opened up to include both positive and negative aspects of video game play.

1. Introduction

Video games have been a substantial and steadily growing part of our modern society for more than 40 years.

Playing games is a popular free time activity among people all around the world. Many educationalists believe that this intrinsic motivation to engage with video games could be combined with educational content to create a 'serious game' with the goal to improve the player's knowledge on various fields. Learning through video games boasts many advantages [Pap09]. They provide a safe environment with individual feedback and options for self assessment and allow for experiential, problem based learning. With their iterative structure, they also advocate activation and building on prior knowledge. Lastly, video games are often simply more enjoyable than traditional methods of teaching and thus more effective. [Gee06])

However, in the areas of Pediatric and Health Education playing video games is often seen as a threat for young people's development and has been associated with numerous risks for physical and mental health.

2. Negative Effects of Video Games

Multiple studies over the last decade have shown that violent media increase aggression. According to Bushman's and Anderson's General Aggression Model (GAM) [BA02] exposure to violent media influences a person's internal affection, cognition and arousal states and thus leads to a short-term increase in aggressive thought. The GAM further connects violent video games and aggressive behaviour by stating that social behaviour is learned over time. Video games may give the lecture that the world is a dangerous place, where aggression is a suitable way to handle conflict. A hostile expectation bias is formed and in return the person acts more aggressively.

A study of Gentile et al [GLLW04] also links video game exposure and an increase in hostility and physical fights by pointing out that these harmful effects are even greater for test subjects who are characteristically more aggressive. They furthermore indicate a negative association between the amount of video game play and school performance of test subjects. According to Gentile et al, school activities as well as family interaction and overall social engagement with peers risk getting pushed back in favor of gaming activities.

3. Debate on Video Games

Research dealing with the impact of violent video games on aggressive behaviour is highly inconsistent and often an objective look on the topic is missing. Most studies, however, agree that video games can make some players more hostile. Test subjects, who are suffering from pre-existing mental and personality health issues, like psychoticism and aggressiveness are much more likely to develop aggressive thoughts [MM10]. On the other hand, researchers like Ferguson hold, that those subjects are vulnerable to all sorts of aggressive stimulation, not just video games [Fer10].

Especially the media blames violence and crimes on the influence of games. The debate is repeatedly fueled with misinformation and claims from both sides are taken for granted and approved with little skepticism. Findings are much more inconsistent than reported by some researchers and often weak effects are interpreted very strongly. As a direct cause of this moral panic wheel positive effects of video games are neglected [Pap09].

Ferguson [Fer10] pinpoints the problems with the video game aggression research on 4 points: 1) Aggression measures are invalid. Different studies measure aggressive behaviour in different ways. These unstandardized tests result in different outcomes and effect-ranges. 2) Additional variables, like gender, family background and genetics may account for small connections between video games and aggression and are not sufficiently controlled, nor discussed.

3) Often times contradicting work is ignored or not adequately discussed by researchers. There also seems to exist a publication bias, in which papers that show some sort of correlation between aggression and games get more attention than papers that suggest null-results. 4) Links found between violent media and aggressive behavior often have small effect sizes, that are too insignificant to be meaningful. Nevertheless, these findings are often exaggerated by the studies. On the contrary, violent crime data indicates an entirely different relation between video games and aggressive behaviour. Figure 1 points out that over the last decade, video games have become more and more popular, while the violent crime rate decreased. This data suggests, that violent video games are not at fault for heaving created a generation of violent youth the media so often feared.
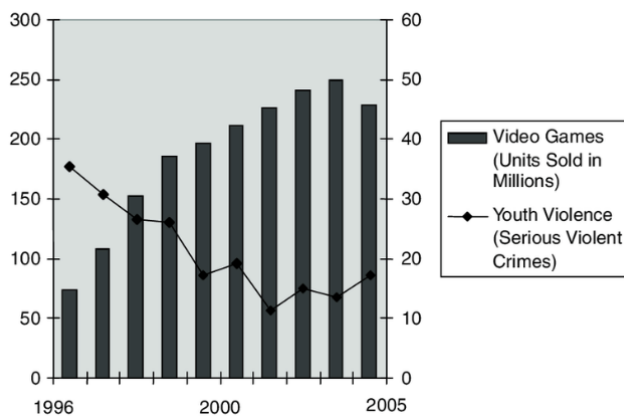
Figure 1: *Video Games Sales and Youth Violence Rates [Fer10]*

4. Positive Effects of Video Games

The majority of anti game activists fears that interacting with other people through video games may lead to reduced social skills and sparse friendships. Current studies, however, propose that social connections formed through online games are very well on par with deep and meaningful relationships formed in real life [Squ03]. Modern video games are often very social activities that allow for complex social interactions, which in return can very well encourage social experiences offline.

As stated before, many scientists view video games as a promising platform for education. Games are effective at transmitting and developing skills with raw data, like visual cognition, science and math proficiency [Fer10]. As a medium, they support multisensory, problem based learning. With its interactive game play loops and immediate feedback already learned knowledge is activated time and time again and fostered further [Pap09]. In order for these educational games to be successful, however, they need to incorporate game play that boosts the player's motivation and redirects the attention to educational purposes. Many researcher argue that this is where violent elements in video games come into great effect. Since educational games have to compete with commercially available ones, they are at a huge disadvantage if they ignore the demands of potential players. Additionally, the fast and

active game play of violent games seems to be more effective at improving the player's perception, processing and visual memory skills than nonviolent games [Fer10].

5. Conclusion

Many discussions about violent video games fail to take an objective view on the topic and conduct no thorough investigation of specified facts and results. This also applies for research regarding the positive effects of video games. Sufficient investigation may very well prove that violent video games cause more harm than good. But by labeling video games as bad and violent per se, potential benefits for education and general human well-being are disregarded. In order to combat this inconsistent research and scientific dogma, a broader look on the topic has to be taken.

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