Does the Nintendo Wii's use of Motion Controls Effect Player Aggression?

COMP230 - Ethics and Professionalism Essay

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November 28, 2016

This essay will look at motion controls in video games and how they affect the player's aggression levels. It will specifically look at the Nintendo Wii games console and the Wiimote controller.

1 Introduction

The effect of violent video games on player aggression is a commonly addressed subject and one that appears often in the media [1, 2, 3]. However, the evaluation of these games mostly focuses on the violence and the graphics, not the control schemes and mapping. The Nintendo Wii is a games console that tracks the player's movement for input. This essay will look at whether the use of motion controls with natural mappings effects player aggression levels.

2 Violent Video Games and Player Aggression

Modern video games have vastly improved graphics compared to games from previous generations [4]. There has also been an increase in violent content in commercial video games [4]. The improvement in graphics means that violence looks more realistic than in previous generations and is more immersive [5].

One issue with video games violence is how the violence is viewed and whether it is ethical. Forsyth says an absolutist would say murder is wrong under any circumstance [6]. Yet video game violence is a pretence and the player is not harming a living person [7]. However, Forsyth's ideas date back to 1980 so may not be applicable to modern video games. [6] This also raises the issue of whether video game violence should be viewed in the same way as real violence. Motion controls complicate this further as the player is physically acting out the violence with the intention of harming a virtual character.

Numerous previous studies have looked at the effects of video game violence and aggression. Sherry found that video games do increase player's aggression levels. However, this rise is smaller than the effect of seeing violence on television [8]. The rise in aggression is also short term from when the player starts playing a game. This implies that the rise in aggression fades. Even though video games can cause an increase in aggression this does not necessarily translate into aggressive behaviours [9].

The Wii was released in 2006, the FBI crime statistics for America show an increase in violent crime that year [10]. However, there was a decrease when compared to the predicted trends for that year. The amount of violent crimes in America in 2006 was the third lowest in the last two decades [11].

This data suggests that the release of the Wii did not cause a significant rise in violent crime. If the Wii caused aggression that led to violent behaviour it would have been expected to see a significant rise in crime that year.

3 Motion controls in video games

Motion controls are control systems that track the player's movement. One type of motion control mapping is kinesic natural mapping. This captures the player's movement without controllers or any physical props. Another type is incomplete tangible natural mapping. This requires a physical object, such as the Wiimote. The Wiimote uses an accelerometer and infra-red to detect the player's movements. Both versions of motion control track the player's movement and translate it into an in game action [12].

Both types provide more intuitive and interactive controls than a conventional controller [5]. However, they need the user to mimic real life actions including violent ones.

Improvements in technology means that video games continue to get more realistic. Graphics and sound have been improving increasing the player's immersion in the game [5].

McArthur suggests that users may not want full immersion but instead "neo-immersion" [13]. Immersion in games is the loss of self, social and game awareness. In contrast Neo-Immersion focuses on those three factors [14]. Wii Sports is a game released with the Wii that tracks player movement using a Wiimote. Whitson suggests that this game is not trying to fully immerse the player as they are likely to be playing it with friends and family. However, as this is only one game of many released on the Wii platform this idea cannot be applied to them all. However, this suggests that while motion

controls make the game more interactive they can also make it more social, reducing conventional immersion.

Games such as Manhunt have been referred to as 'true murder simulators' when played on the Wii [15]. This is due to the player having to mimic the violent acts performed in game. The game has also been blamed for murder that was similar to violent acts in the game which led to the game being withdrawn from sale from UK stores [16, 17]. However there has been no official evidence to confirm whether playing Manhunt led to the murder.

4 Video Game Controls and Competence

A possible cause for aggression when using motion controls could be how well an action or movement is translated from reality into a game.

The Frustration — Aggression hypothesis says that aggression is caused when a person is being blocked from reaching their goal [18]. Przybylski *et al* found links between competence impeding controls and aggression. They say that competence-impeding controls "have the potential to aggravate and demotivate players [19].

Games using motion controls are more intuitive as they use movement the player already knows [5]. However, this could cause frustration for players who have experience in real life of what they are trying to accomplish in game. For example, if the player has experience with guns they may find a Wiimote does not work the same way making them feel incompetent.

McArthur *et al* found that the Wiimote accessory that held the closest resemblance to a gun had the highest error rate [13]. However, their study did not include details to whether participants had previous experience with guns. Therefore, it is unclear whether the errors were due to an issue with

the accessory or that it did not operate realistically.

5 Virtual Reality

Television was once criticized for causing violence the same way video games now are [8].

Virtual Reality (VR) is an emerging technology that attempts to fully immerse the player in a virtual world. VR consists of a Head Mounted Display (HMD) and often motion controllers similar to the Wiimote. Looking at the previous evidence for video games and motion controls it would suggest that VR will soon be accused of causing aggression in the same way video games currently are. Game developers at Guerilla Games said that their VR game R.I.G.S deliberately avoided violence and murder as they believe it to be too intense as the player cannot look away [20]. Polygon writer Kuchera says "Its' hard to imagine that people want to feel their virtual killing more acutely" [21].

6 Conclusion

In conclusion, the use of the Wiimote in violent games does not appear to cause significant changes in player aggression. However, it could cause players to feel incompetent which can lead to aggression. This incompetence could be due to poor mapping between the action and the movement required for the game or inaccurate controls.

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