Violent Video Games and Aggression

Colleen Houck

Broome Community College

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The psychological effect from playing video games is a topic of some concern for parents as children, teens and even many adults have become consumed with the pastime. Adverse health effects are being linked to game playing, especially those of a violent nature. As a parent of a ten-year-old boy, I too am concerned about the negative effects on my son's present and future emotional state. While playing a video game may seem innocent enough, the physical and emotional stress on the body may be a real concern if the game involves violence (Ivarsson, Anderson, Åkerstedt & Lindblad, 2009).

We have all heard some mention in the media at one time or another about parents being concerned that their children might be more apt to kill someone if they are exposed to violence in the media (i.e. movies, television shows or video games) (Barlett, Branch, Rodeheffer & Harris, 2009). Studies have shown that aggressive behavior may or may not be directly linked to exposure to violent gaming. There is, however, still cause for further research as our society has allowed the playing of video games to top the list of children's leisure activities. This is further reason to study the long-term effects as data is inconclusive at this time (Teng, Chong, Siew & Skoric, 2011).

Short term effects are more readily available as numerous studies have been conducted. Not only do heart rates appear to increase with exposure to violent gaming, but some people have shown an increased desensitization to violence (Engelhardt, Bartholow, Kerr & Bushman, 2011). If this is true, what then are we teaching our youth? We may be sending a message that condones violent behavior and downplays aggression. A prime example of societal blame is the

recent sale of the violent military-style game, *Call of Duty: Modern Warfare 3* with its record \$400 million is sales in November of 2011 (Wakin, 2011).

One study in particular has shown that the state of "stress" from violent video gaming increases cardiovascular activity that is not in proportion to the metabolic needs of the body at that time (Borusiak, Bouikidis, Liersch, Russell, 2008). Another study concluded that feelings of hostility and aggression were the result of playing video games with violent behavior such as shooting or choking (Panee & Ballard, 2002). One further study exhibited increase in anxiety of the subjects as well as systolic blood pressure during violent gaming (Baldaro, Tuozzi, Codispoti, Montebarocci, Barbagli, Trombini & Rossi, 2004). Various other studies have found similar results. This proves that video games that incorporate violence may alter certain physiological components in the body which are associated with aggression. Competition, which is also sometimes present with violent games, may indeed also have the same altering effects (Harrison, Denning, Easton, Hall, Burns, Ring and Carroll, 2001).

Abundant research illustrates the possible effects that video gaming has on aggression. I wish to steer clear of the media sensation that "video games are damaging to the brain" and primarily focus on the biological factors that are associated with violent digital game playing (Bavelier, Green, Han, Renshaw, Merzenich & Gentile). Therefore, it is my hypothesis that playing violent video games will result in aggressive behavior shortly after playing.

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