

# Video Games in Education: an Analysis beyond Prejudice

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# Video games and aggressive behaviors

The most mentioned theories about this topic are:

- the ***General Theory of Arousal***: video games would increase the level of excitement of the player, who would then transfer this increased energy in the actions he performs in daily life;
- the ***Theory of Social Learning***: claims that behavior is learned through the imitation of attractive patterns and related rewards;
- the ***Theory of Catharsis***: claims that the vision of violent contents helps to inhibit the possibility that aggressive conduct is effectively determined in real life.



# Violent video games are not linked to aggressive behaviors, researchers say (1/2)

One longitudinal study (Markey & Markey, 2014), conducted at Villanova University and Rutgers University, analyzed:

- changes in sales of violent video games and in the number of violent crimes from 1978 to 2011;
- monthly changes in sales of violent video games and crimes from 2007 to 2011;
- the volume of online searches for guides and solutions for violent games and the number of violent crimes from 2004 to 2011;
- violent crimes following the release of *Grand Theft Auto: San Andreas*, *Grand Theft Auto IV* and *Call of Duty: Black Ops*.



# Violent video games are not linked to aggressive behaviors, researchers say (2/2)

- Children, from the age of 7 years, can distinguish between virtual violence played in the context of a game and that acted in the real world (Malliet, 2006).
- Aggressive behaviors seem to be more linked to competitive video games than to violent video games (Adachi P., Willoughby T., 2013).
- Usually, the aggressive behaviors of the players are analyzed only in the 10/15 minutes following the playing session (Przybylski A., Rigby S., & Ryan R., 2010).



# Violent contents in coming-of-age stories

- The use of the aesthetics of violence and immoral behaviors is a constant in the works of Grimm brothers, Charles Perrault and many other authors.
- Violent and cruel images and contexts were used to stimulate ethical or social reflections.
- The violent events experienced by the characters generally correspond to tests to be overcome, from which to learn lessons and recognize, if necessary, their mistakes.



# *Hansel and Gretel (1812)* by Grimm brothers



This story develops around the topic of **cannibalism**, indeed the witch wants to eat the children.



# *Little Red Riding Hood* (1857) by Grimm brothers

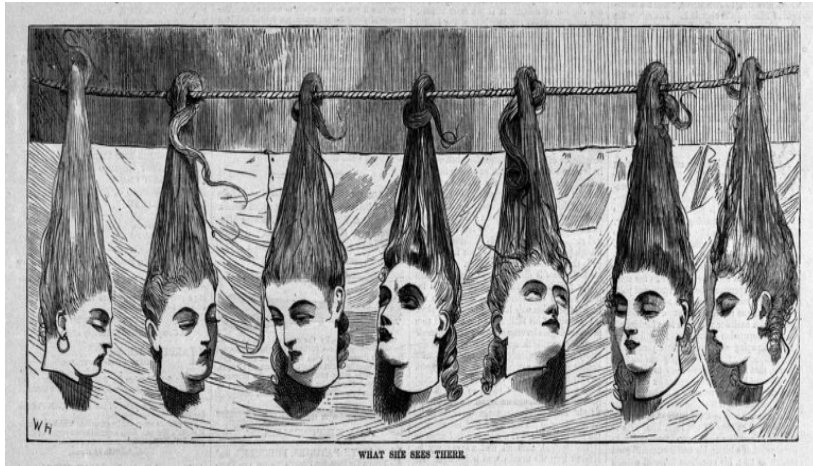


In this story, we can find elements linked to **pedophilia** and **cannibalism**.





# *Bluebeard* (1697) by Charles Perrault



This story develops around the topic of **femicide**, indeed Bluebeard is the prototype of the perfect **serial killer**.



# Violent video games as educational tools

- As well as coming-of-age stories, video games offer the opportunity to the player to **“live” challenging contexts** into a **safe and protected environment**.
- Children can explore virtually and without consequences ethical issues such as war, violence, death and war-themed video games can make them more aware of the human and social costs of war.



# *Fallout* (1997-2015)

***Fallout***: violent action RPG (Role Playing Game), is considered by experts one of the best video games of all time and is set in a post-apocalyptic future, the result of devastating nuclear conflict with which ended a long war to grab the last deposits of oil and uranium.



# *Undertale* (2015)

***Undertale***: is acclaimed by the critics as one of the most innovative games ever designed, especially for the accurate representation of the characters. The main protagonist is a child, struggling with the exploration of a mysterious underground world, inhabited by monsters that hinder his ascent into the sunlight.



# *Watch\_Dogs* (2014)

*Watch\_dogs*: is an open world action game developed by Ubi Soft with a strong cyberpunk connotation and is based on a highly topical plot - the threats to privacy and the importance acquired by sensitive data for the control of people's lives



# *Call of Duty* (2003-2018)

***Call of Duty***: probably the most popular series of first-person shooter games, in which players are completely immersed in the context of war and have the opportunity to experience it.





# References

- Adachi P., Willoughby T. (2013). Demolishing the Competition: The Longitudinal Link Between Competitive Video Games, Competitive Gambling, and Aggression, *Journal of Youth and Adolescence*, 42(7), 1090-1104.
- Egenfeldt-Nielsen S., Heide Smith J. (2003). Playing With Fire. How do computer games affect the player? - Report for The Media Council for Children and Young People, *Game Research - The Art, Science, And Business Of Computer Games*.
- Feshbach S. & Singer R. D. (1971). *Television and Aggression: An Experimental Field Study*, San Francisco, Jossey-Bass.
- Ferguson C. J., Video Games Don't Make Kids Violent, *Time*, 7<sup>th</sup> December 2011.
- Ferguson, C. J. et al, (2010). Violent video games, catharsis seeking, bullying, and delinquency: A multivariate analysis of effects, *Crime & Delinquency*, 60 (5), 764 – 784.
- Kutner L., Olsen C. K. (2008). *Grand Theft Childhood: The Surprising Truth about Violent Video Games and What Parents Can Do*, New York, Simon & Schuster.
- Malliet S. (2006). An Exploration of Adolescents' Perceptions of Videogame Realism, *Learning Media and Technology*, 377-395.
- Markey P. M., Markey C.N., French J. E. (2014). Violent Video Games and Real-World Violence: Rhetoric Versus Data, *Psychology of Popular Media Culture*, 4(4), 277-295.
- Olson C., et al. (2007). Factors Correlated with Violent Video Game Use by Adolescent Boys and Girls, *Journal of Adolescent Health*, 41(1), 77-83.
- Przybylski A., et al. (2010). A Motivational Model of Video Game Engagement, *Review of General Psychology*, 14(2), 154-166.
- Salonius-Pasternak D., Gelfon H. (2005). The Next Level of Research on Electronic Play: Potential Benefits and Contextual Influences for Children and Adolescents, *Human Technology*, 1(1), 5-22.



**Thank you  
for your attention!**



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