

Bandura's Bobo doll experiment and violence in the media.

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Abstract

Violence in the media has been the subject of heated debate for more than half a century. Social scientists still cannot determine whether media violence causes children to be more aggressive or not. The term "Media violence", as used in this paper, refers to the depiction of aggression and violence in the media. This article shows an overview of two kinds of studies, one suggesting that media violence does lead to more violent behavior and others showing that this may not be the case. Some of them even seem to show that media violence (e.g. violent games) might have a positive effect. Lastly the implications for policy and legislation are considered and suggestions for further research are given.

Keywords: *media violence, children, aggression, television, video games*

Introduction

Ever since the introduction of television and computers into everyday life, there has been an ongoing debate about how these media affect children. Violence in the media has especially received a great deal of attention, with some people claiming that it leads to more violent and antisocial behavior among children in their daily life. Think about various shooting incidents at schools, such as Columbine or Newtown, where it is often said in news reports that perpetrators are fans of violent video games. Ironically, some of the same media outlets that show explicit violence or shocking imagery also report that violence in the media makes children more violent.

Social scientists have studied this topic for several decades and a large number of studies has been published. This mainly consists of many review articles, including ones that have conducted meta-analyses. But there still is no definite conclusion. It is important that the social sciences be accountable to society and gather knowledge that will hopefully help to improve society and its people. So what makes people think that media violence will affect children's behavior and does this in fact influence them? In this article we will focus on television, film and video games, because of the widespread availability and often fairly explicit content of these media.

This article will begin with a description and discussion of Bandura's classic Bobo Doll experiment, a discussion of the reasons why social scientists still do not agree on this topic, and the implications this might have on policy and legislation regarding media violence. The term "Media violence", as used in this paper, refers to the depiction of aggression and violence in the media.

Bandura's Bobo doll experiment

The Bobo doll experiment is a very famous study conducted by Bandura, Ross, and Ross in 1961. In this experiment, children were seated in a room and given toys to play with while an adult in the same room either interacted aggressively with a big Bobo Doll (i.e., an inflated, doll shaped like a giant bowling pin with the printed image of a clown) or ignored the doll completely. Next, the children were subjected to mild frustration and taken into another room with the same kind of doll. Several observers then measured the child's behavior with respect to various forms of aggressiveness. All the children had been assessed on levels of aggression before the actual experiment as well. Besides ruling out predetermined levels of aggression as

a cause, the experimenters also looked at the kind of aggression displayed by the children. By observing the exact actions of the children they were able to see if the children were in fact copying the behavior they had seen in the experimental condition or if they were aggressive by nature. What they found was that children who had been exposed to the violent interaction between the adult and the doll were more aggressive than children in the non-violent condition or children in the control group. Sex differences were found, with girls being less aggressive than boys. The theory that arose from this experiment, Bandura's social learning theory states that children learn how to behave in social situations by imitating the behavior of adults (Bandura, 1961).

In 1963 Bandura, Ross, and Ross published the results of another study. This experiment looked at how children were influenced by the aggressive behavior of adults they saw either in real life or on film, as well as the aggressive behavior of a cartoon character. The children watched aggressive behavior in one of these three conditions. Afterwards they were subjected to mild frustration before being put in a room with toys. Here the children were observed and rated on various forms of aggressive behavior. The conclusion was that, in every condition, children were more aggressive than the control group and that they imitated the behavior they had seen. Sex differences were found, again with girls being less aggressive than boys.

Looking at both of these experiments, it is clear that children's behavior is influenced by what they observe. It is especially the second experiment that is of interest in this article, because it shows that children do not just imitate behavior they see in real life, but behavior they see on television as well, even by fictional non-human characters. Following the social learning theory it seems logical that more violent media, currently found not only on television and in film, but also in games, would lead to more violent behavior in children.

Research confirming the hypothesis

Multiple researchers have found results that confirm this hypothesis. The influence of television violence has been studied for several decades, going back to the 1950-s (e.g. Himmelweit, Oppenheim, & Vince, 1958). Video games on the other hand have only recently become of interest to researchers. Murray (2008) cites an enormous body of work dedicated to the influence of television violence on young people and this influence seems to be mostly negative (e.g., Dominick & Greenberg, 1972; Lovaas, 1961). For instance one thing Liebert and Baron (1972) showed in their research was that violent television programs may not only lead to violent behavior, but can lead to antisocial behavior as well. The children in their experiment who had watched a violent show on television were less likely to help their peers who were performing a task and more likely to hinder them.

Children thus do not necessarily mimic all behavior that they observe, but it seems that the aggressive message they get from television might also change their general mindset. This is interesting when looking at this problem from a sociological as well as from a psychological or pediatric point of view. More violent and antisocial behavior is not only a concern on an individual developmental level, but also for society as a whole.

A 15-year longitudinal study begun in 1977 with children who were then six to nine years old reveals that exposure to television violence is not only correlated with aggression during youth, but also positively correlates with aggressive behavior in adulthood and quite remarkably no differences were found between males and females (Huesmann, Moise-Titus, Podolski, & Eron, 2003). Consequences of exposure to violent television shows reported in both Murray (2008) and Villani (2001) are that children not only learn how to be violent and aggressive by watching violence on television or in films, but that they also become desensitized to violence (e.g., Federman, 1996, 1997, 1998; Drabman & Thomas, 1974).

So television and film do not only model aggressive behavior to children, but they also cause these children to consider violence to be something normal, something that is a normal part of life. When violence is considered to be the norm, this may lower the threshold for children to act aggressively. Children also seem to become more fearful, overestimating the chances of encountering violence in their own lives.

Interestingly the studies Villani (2001) references, regarding video games, seem to suggest that there is no positive relationship between video games and increase in violent behavior. Villani notes that this may be due to the fact that research on videogames was lacking at the time she published her paper. However the meta-analysis of Sherry (2001), published in the same year, is dedicated in its entirety to the influence of violent video games on children, referencing nearly 30 articles regarding this specific topic. This meta-analysis finds a small-to-medium positive correlation between exposure to violent media and aggressive behavior. Sherry (2001) notes that even though this correlation is significant, the effect size for a correlation between television and aggression found by Paik and Comstock (1994) is twice as large. Sherry (2001) further concludes that the *type* of video game played is an important variable, with realistic human violence and fantasy violence leading to more violent behavior than sports violence and also that the amount of time spent playing a video game influences violent behavior. This is an alarming conclusion because children seem to spend more and more time playing games (Roberts, Foehr, & Rideout, 2005) and also because, with the graphical improvements of the gaming industry, video games are becoming more and more realistic. At the end of the article, Sherry (2001) does note that the reason for the correlation he found is unclear, and further research needs to investigate this. If the increase in aggressive behavior after playing games is due to heightened arousal, then the effect may only be short term in nature.

Research disagreeing with the hypothesis

Though Browne and Hamilton-Giachritsis (2005) came to the conclusion that there seems to be a small but significant effect of media violence on children, they do point out some limitations in the research done so far. First of all, they note that it is important to remember that correlation does not equal causation. Thus, it is possible that aggressive children prefer watching violent shows or playing violent video games more than non-aggressive children. Based on the findings of current research, it is simply not possible to state that media violence *causes* aggression, but only that there is a correlation between the two. Secondly they comment on the fact that most of the studies have involved observational research in laboratory settings, which mainly focused on short-term effects. This kind of research may not be representative, because it is often so very different from the situations encountered in real life. Although short-term effects are interesting in themselves as well, this is a case where it seems to be more important to look at long-term effects.

This influence is found as well in the previously mentioned studies. The previously cited study by Huesmann, Moise-Titus, Podolski, and Eron (2003) is subjected to these same problems. That study found significant long-term effects, but it is only one of only a few in which this was the case. Finally they argue that a lot of the research does not take other influences into account. Very few researchers seem to have considered the contributions of parental influences, family violence, cultural influences, deviant peers or possible psychopathological problems. Ferguson, Garza, Jerabeck, Ramos, and Galindo (2013) refer to a study by Steinberg and Monahan (2010) that showed that, if results are corrected for environmental influences, the correlation between violent media and violent behavior in children disappears. More cases of wrongly reported significant findings have been found (e.g., Ferguson, 2011; Wallenius & Punamäki, 2008)

Another additional criticism, noted by Ferguson et al. (2013), has to do with the way that measurements are reported and validated. They claim that measures lack standardization and are not clinically validated as indicators of aggression in real life. Olson (2004) adds that the vague and inconsistent definitions of aggression and violence used by researchers may distort the clinical significance of the results found, making it hard to compare studies.

In her 2004 article Olson mentions a large scale study that was commissioned by the U.S. government (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002) in response to multiple school shootings. It was found that, next to gender and suicide attempts, there were no common predictors that allowed profiling of potential attackers. The idea that violent games “causes” of school shootings thus seems to be wrong. However, this notion continues to be widespread. This bias, often reflected in media reports, is something that social scientists should try to correct. Currently, much of media give a great deal of exposure to research that supports this correlation between violent media exposure and aggressive behavior, while ignoring studies that show the opposite. In order for parents to make decisions regarding this issue, it is important that they are well informed.

Being careful about drawing conclusions

So are the media making children more violent or are the media making us believe that this is the case? So far it seems difficult to say what the influence of media is. A lot of research has found significant correlations between exposure to media violence and later violent behavior. Both this fact and some common sense would probably lead you to conclude that the media influence children. Most social scientists probably also come to this conclusion, but, as can be seen, some are very critical of the way most of this research has been conducted. These researchers do not necessarily disagree with the hypothesis, but they are skeptical about the research procedures that have been employed. This skepticism results from knowing the larger societal implications of social research. On the one hand, if media violence leads to more violent behavior then we should try to protect children and take measures to prevent a more antisocial and aggressive society. On the other hand if this is not the case, we do not want to stigmatize young people who enjoy violent television shows or video games, or foster unnecessary concern on the part of their parents.

Such caution is especially in order because some research seems to indicate that for example gaming might have a positive effect on children as well. In Ferguson (2010) there are references to numerous articles that show that playing video games improves visuospatial cognition significantly and this effect is much larger for violent video games than for non-violent ones. Ferguson also notes that, by labeling violent games as automatically “bad”, society might miss out on opportunities to educate children. Video games seem to be a good educational vehicle and, because boys are naturally more drawn to violence, eliminating violent games as a possible educational tool could lead to this teaching method being less effective, because of lack of interest. Another positive effect of violent media seems to be catharsis, a term referring to the release of strong emotions, in this case anger, in a way that, while perhaps violent, is not truly harmful to others. Denzler and Forster (2012) show in their study that participants who played a violent game with aggression reduction as a goal, indeed showed less aggression afterwards. In this case, violent games might actually lead to lower levels of aggression, since children have the opportunity to vent their aggressive feelings in a harmless way.

Implications on policy and legislation

Even though no definite conclusion is possible, it does seem that there is at least some form of correlation between media violence and aggressive behavior in children. The suspicion that media violence causes children to be more violent is important, because it may have some

very serious consequences for policy and legislation in this area. A very well-known rating system used for movies is that of the Motion Picture Association of America (MPAA). This system is not enforced by law and helps parents to decide whether a movie is appropriate for their child. It divides movies into five categories, suitable for different ages, based on language use and the presence of violence, drugs and sex. A similar rating system for video games is that of the Entertainment Software Rating Board (ESRB). Similar systems are maintained in other countries or parts of the world. Though these initiatives are helpful to parents in doubt, they are not optimal. Ratings can be misinterpreted or ignored. These rating systems should definitely be kept in place, but they will be more useful when parents are well informed.

There is also research that reports that violent behavior in children decreases if there is active parental supervision and involvement. Cantor and Wilson (2003) showed that, if an adult points out that violence is bad and makes negative comments while the child is watching a violent scene, children are less aggressive afterward. If an adult makes no comments, however this is interpreted by the child as tacit approval. Therefore it is very important to inform parents that they need to monitor what their child watches but that they also need to actively discuss with their children what is going on. Recommendations by the American Academy of Pediatrics (2009) add to this that parents should limit screen time and remove television and game consoles from the children's bedrooms. They also recommend that media producers avoid glamorization and normalization of violence, portraying violence as something funny, and violence in media productions aimed at young children. A classroom intervention might also be helpful according to Rosenkoetter, Rosenkoetter, and Acocks (2009). In their study, children received lessons from the REViEW program for two years, where they were taught to diminish the amount of time they spent in front of the television and to be critical and objective when watching television. This intervention successfully led to children watching fewer violent programs on television. Even Bandura himself showed that exposing children to one condition of his classic Bobo Doll experiment in which adults who mistreated the Bobo Doll were punished for their behavior led to a decrease in aggressive behavior in those children (Bandura, 1965).

Conclusion

It seems that still after all these years and all this research it remains difficult to draw a conclusion regarding the effects of exposure of children to media violence. Based on the research so far, we suspect that a definite correlation will be found eventually, but future research should be interpreted cautiously. Until a more definite conclusion is reached, we should be careful with exposing children to violent media and help them to put the violence they see in the media into perspective. Future research should focus on the limitations named above. Guidelines and agreements should be established about how measurements should be validated and interpreted, and also regarding the precise definition and use of terms like "aggression" and "violence". Research should focus more on the possible long term effects and the manifestation of aggressive behavior in real life. In addition research should take demographic variables and their possible influence into consideration more often in an effort to determine if some groups in society are more vulnerable than others. Lastly research might also focus on possible beneficial effects violent media may have, such as improved cognitive functioning or catharsis.

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