

Research on the Effects of Media Violence

Media Violence and Its Effect on Aggression Whether or not exposure to media violence causes increased levels of aggression and violence in young people is the perennial question of media effects research. Some experts, like University of Michigan professor L. Rowell Huesmann, argue that fifty years of evidence show "that exposure to media violence causes children to behave more aggressively and affects them as adults years later." Others, like Jonathan Freedman of the University of Toronto, maintain that "the scientific evidence simply does not show that watching violence either produces violence in people, or desensitizes them to it."

Many Studies, Many Conclusions

Andrea Martinez at the University of Ottawa conducted a comprehensive review of the scientific literature for the Canadian Radio-television and Telecommunications Commission (CRTC) in 1994. She concluded that the lack of consensus about media effects reflects three "grey areas" or constraints contained in the research itself.

First, media violence is notoriously hard to define and measure. Some experts who track violence in television programming, such as George Gerbner of Temple University, define violence as the act (or threat) of injuring or killing someone, independent of the method used or the surrounding context. Accordingly, Gerber includes cartoon violence in his data-set. But others, such as University of Laval professors Guy Paquette and Jacques de Guise, specifically exclude cartoon violence from their research because of its comical and unrealistic presentation.

Second, researchers disagree over the type of relationship the data supports. Some argue that exposure to media violence causes aggression. Others say that the two are associated, but that there is no causal connection. (That both, for instance, may be caused by some third factor.) And others say the data supports the conclusion that there is no relationship between the two at all.

Third, even those who agree that there is a connection between media violence and aggression disagree about how the one effects the other. Some say that the mechanism is a psychological one, rooted in the ways we learn. For example, Huesmann argues that children develop "cognitive scripts" that guide their own behaviour by imitating the actions of media heroes. As they watch violent shows, children learn to internalize scripts that use violence as an appropriate method of problem-solving.

Other researchers argue that it is the physiological effects of media violence that cause aggressive behaviour. Exposure to violent imagery is linked to increased heart rate, faster respiration and higher blood pressure. Some think that this simulated "fight-or-flight" response predisposes people to act aggressively in the real world.

Still others focus on the ways in which media violence primes or cues pre-existing aggressive thoughts and feelings. They argue that an individual's desire to strike out is justified by media images in which both the hero and the villain use violence to seek revenge, often without consequences.

In her final report to the CRTC, Martinez concluded that most studies support "a positive, though weak, relation between exposure to television violence and aggressive behaviour." Although that relationship cannot be "confirmed systematically," she agrees with Dutch

researcher Tom Van der Voot who argues that it would be illogical to conclude that "a phenomenon does not exist simply because it is found at times not to occur, or only to occur under certain circumstances."

What the Researchers Are Saying

The lack of consensus about the relationship between media violence and real-world aggression has not impeded ongoing research. Here's a sampling of conclusions drawn to date, from the various research strands:

Research strand: Children who consume high levels of media violence are more likely to be aggressive in the real world

In 1956, researchers took to the laboratory to compare the behaviour of 24 children watching TV. Half watched a violent episode of the cartoon Woody Woodpecker, and the other 12 watched the non-violent cartoon The Little Red Hen. During play afterwards, the researchers observed that the children who watched the violent cartoon were much more likely to hit other children and break toys.

Six years later, in 1963, professors A. Badura, D. Ross and S.A. Ross studied the effect of exposure to real-world violence, television violence, and cartoon violence. They divided 100 preschool children into four groups. The first group watched a real person shout insults at an inflatable doll while hitting it with a mallet. The second group watched the incident on television. The third watched a cartoon version of the same scene, and the fourth watched nothing.

When all the children were later exposed to a frustrating situation, the first three groups responded with more aggression than the control group. The children who watched the incident on television were just as aggressive as those who had watched the real person use the mallet; and both were more aggressive than those who had only watched the cartoon.

Over the years, laboratory experiments such as these have consistently shown that exposure to violence is associated with increased heartbeat, blood pressure and respiration rate, and a greater willingness to administer electric shocks to inflict pain or punishment on others. However, this line of enquiry has been criticized because of its focus on short term results and the artificial nature of the viewing environment.

Other scientists have sought to establish a connection between media violence and aggression outside the laboratory. For example, a number of surveys indicate that children and young people who report a preference for violent entertainment also score higher on aggression indexes than those who watch less violent shows. L. Rowell Huesmann reviewed studies conducted in Australia, Finland, Poland, Israel, Netherlands and the United States. He reports, "the child most likely to be aggressive would be the one who (a) watches violent television programs most of the time, (b) believes that these shows portray life just as it is, [and] (c) identifies strongly with the aggressive characters in the shows."

A study conducted by the Kaiser Family Foundation in 2003 found that nearly half (47 per cent) of parents with children between the ages of 4 and 6 report that their children have imitated aggressive behaviours from TV. However, it is interesting to note that children are more likely to mimic positive behaviours — 87 per cent of kids do so.

Recent research is exploring the effect of new media on children's behaviour. Craig Anderson and Brad Bushman of Iowa State University reviewed dozens of studies of video gamers. In 2001, they reported that children and young people who play violent video games, even for short periods, are more likely to behave aggressively in the real world; and that both aggressive and non-aggressive children are negatively affected by playing.

In 2003, Craig Anderson and Iowa State University colleague Nicholas Carnagey and Janie Eubanks of the Texas Department of Human Services reported that violent music lyrics increased aggressive thoughts and hostile feelings among 500 college students. They concluded, "There are now good theoretical and empirical reasons to expect effects of music lyrics on aggressive behavior to be similar to the well-studied effects of exposure to TV and movie violence and the more recent research efforts on violent video games."

Research Strand: Children who watch high levels of media violence are at increased risk of aggressive behaviour as adults

In 1960, University of Michigan Professor Leonard Eron studied 856 grade three students living in a semi-rural community in Columbia County, New York, and found that the children who watched violent television at home behaved more aggressively in school. Eron wanted to track the effect of this exposure over the years, so he revisited Columbia County in 1971, when the children who participated in the 1960 study were 19 years of age. He found that boys who watched violent TV when they were eight were more likely to get in trouble with the law as teenagers.

When Eron and Huesmann returned to Columbia County in 1982, the subjects were 30 years old. They reported that those participants who had watched more violent TV as eight-year-olds were more likely, as adults, to be convicted of serious crimes, to use violence to discipline their children, and to treat their spouses aggressively.

Professor Monroe Lefkowitz published similar findings in 1971. Lefkowitz interviewed a group of eight-year-olds and found that the boys who watched more violent TV were more likely to act aggressively in the real world. When he interviewed the same boys ten years later, he found that the more violence a boy watched at eight, the more aggressively he would act at age eighteen.

Columbia University professor Jeffrey Johnson has found that the effect is not limited to violent shows. Johnson tracked 707 families in upstate New York for 17 years, starting in 1975. In 2002, Johnson reported that children who watched one to three hours of television each day when they were 14 to 16 years old were 60 per cent more likely to be involved in assaults and fights as adults than those who watched less TV.

Kansas State University professor John Murray concludes, "The most plausible interpretation of this pattern of correlations is that early preference for violent television programming and other media is one factor in the production of aggressive and antisocial behavior when the young boy becomes a young man."

However, this line of research has attracted a great deal of controversy. Pulitzer Prize-winning author Richard Rhodes has attacked Eron's work, arguing that his conclusions are based on an insignificant amount of data. Rhodes claims that Eron had information about the amount of TV

viewed in 1960 for only 3 of the 24 men who committed violent crimes as adults years later. Rhodes concludes that Eron's work is "poorly conceived, scientifically inadequate, biased and sloppy if not actually fraudulent research."

Guy Cumberbatch, head of the Communications Research Group, a U.K. social policy think tank, has equally harsh words for Johnson's study. Cumberbatch claims Johnson's group of 88 under-one-hour TV watchers is "so small, it's aberrant." And, as journalist Ben Shouse points out, other critics say that Johnson's study "can't rule out the possibility that television is just a marker for some unmeasured environmental or psychological influence on both aggression and TV habits."

Research Strand: The introduction of television into a community leads to an increase in violent behaviour

Researchers have also pursued the link between media violence and real life aggression by examining communities before and after the introduction of television. In the mid 1970s, University of British Columbia professor Tannis McBeth Williams studied a remote village in British Columbia both before and after television was introduced. She found that two years after TV arrived, violent incidents had increased by 160 per cent.

Researchers Gary Granzberg and Jack Steinbring studied three Cree communities in northern Manitoba during the 1970s and early 1980s. They found that four years after television was introduced into one of the communities, the incidence of fist fights and black eyes among the children had increased significantly. Interestingly, several days after an episode of Happy Days aired, in which one character joined a gang called the Red Demons, children in the community created rival gangs, called the Red Demons and the Green Demons, and the conflict between the two seriously disrupted the local school.

University of Washington Professor Brandon Centerwall noted that the sharp increase in the murder rate in North America in 1955 occurred eight years after television sets began to enter North American homes. To test his hypothesis that the two were related, he examined the murder rate in South Africa where, prior to 1975, television was banned by the government. He found that twelve years after the ban was lifted, murder rates skyrocketed.

University of Toronto Professor Jonathan Freedman has criticized this line of research. He points out that Japanese television has some of the most violent imagery in the world, and yet Japan has a much lower murder rate than other countries, including Canada and the United States, which have comparatively less violence on TV.

Research Strand: Media violence stimulates fear in some children

A number of studies have reported that watching media violence frightens young children, and that the effects of this may be long lasting.

In 1998, Professors Singer, Slovak, Frierson and York surveyed 2,000 Ohio students in grades three through eight. They report that the incidences of psychological trauma (including anxiety, depression and post-traumatic stress) increased in proportion to the number of hours of television watched each day.

A 1999 survey of 500 Rhode Island parents led by Brown University professor Judith Owens revealed that the presence of a television in a child's bedroom makes it more likely that the child will suffer from sleep disturbances. Nine per cent of all the parents surveyed reported that their children have nightmares because of a television show at least once a week.

Tom Van der Voort studied 314 children aged nine through twelve in 1986. He found that although children can easily distinguish cartoons, westerns and spy thrillers from reality, they often confuse realistic programmes with the real world. When they are unable to integrate the violence in these shows because they can't follow the plot, they are much more likely to become anxious. This is particularly problematic because the children reported that they prefer realistic programmes, which they equate with fun and excitement. And, as Jacques de Guise reported in 2002, the younger the child, the less likely he or she will be able to identify violent content as violence.

In 1999, Professors Joanne Cantor and K. Harrison studied 138 university students, and found that memories of frightening media images continued to disturb a significant number of participants years later. Over 90 per cent reported they continued to experience fright effects from images they viewed as children, ranging from sleep disturbances to steadfast avoidance of certain situations.

Research Strand: Media violence desensitizes people to real violence

A number of studies in the 1970's showed that people who are repeatedly exposed to media violence tend to be less disturbed when they witness real world violence, and have less sympathy for its victims. For example, Professors V.B. Cline, R.G. Croft, and S. Courier studied young boys over a two-year period. In 1973, they reported that boys who watch more than 25 hours of television per week are significantly less likely to be aroused by real world violence than those boys who watch 4 hours or less per week.

When researchers Fred Molitor and Ken Hirsch revisited this line of investigation in 1994, their work confirmed that children are more likely to tolerate aggressive behaviour in the real world if they first watch TV shows or films that contain violent content.

Research Strand: People who watch a lot of media violence tend to believe that the world is more dangerous than it is in reality

George Gerbner has conducted the longest running study of television violence. His seminal research suggests that heavy TV viewers tend to perceive the world in ways that are consistent with the images on TV. As viewers' perceptions of the world come to conform with the depictions they see on TV, they become more passive, more anxious, and more fearful. Gerbner calls this the "Mean World Syndrome."

Gerbner's research found that those who watch greater amounts of television are more likely to:

- * overestimate their risk of being victimized by crime
- * believe their neighbourhoods are unsafe
- * believe "fear of crime is a very serious personal problem"

* assume the crime rate is increasing, even when it is not

André Gosselin, Jacques de Guise and Guy Paquette decided to test Gerbner's theory in the Canadian context in 1997. They surveyed 360 university students, and found that heavy television viewers are more likely to believe the world is a more dangerous place. However, they also found heavy viewers are not more likely to actually feel more fearful.

Research Strand: Family attitudes to violent content are more important than the images themselves

A number of studies suggest that media is only one of a number of variables that put children at risk of aggressive behaviour.

For example, a Norwegian study that included 20 at-risk teenaged boys found that the lack of parental rules regulating what the boys watched was a more significant predictor of aggressive behaviour than the amount of media violence they watched. It also indicated that exposure to real world violence, together with exposure to media violence, created an "overload" of violent events. Boys who experienced this overload were more likely to use violent media images to create and consolidate their identities as members of an anti-social and marginalized group.

On the other hand, researchers report that parental attitudes towards media violence can mitigate the impact it has on children. Huesmann and Bacharach conclude, "Family attitudes and social class are stronger determinants of attitudes toward aggression than is the amount of exposure to TV, which is nevertheless a significant but weaker predictor."

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