

The Effects of Media Violence

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Research on the impact of violence in the mass media dates back to the Payne Fund Studies in the 1930s which focused on the effects of motion pictures on children. Public and scientific interest on this topic has increased with the widespread accessibility of TV in the 1950s and 1960s and the rise of computer games in the 1980s and 1990s. A number of content analyses conducted throughout the years indicate that the depiction of physical violence is widespread in mass media, e.g., in feature films, comics, animation series, TV news, popular music, and computer games. Compared to statistics about real-life incidents, violence is by far overrepresented in various media products.

Media Violence and Aggression: Majority Consensus

Studies on mass media content, however, do not answer questions on media effects. Most media effect studies conducted so far examined the impact of media violence on aggressive thoughts and behavior. A consensus about the interpretation of the scientific evidence is shared by a majority of academic researchers (see for example AAP et al., 2000). This consensus has two parts: a) Media violence increases the likelihood of aggressive thoughts, feelings, and behavior among the audience, short-term and long-term. The effects on aggression are considered substantial when effect size is compared to other causal relationships reported in the social and medical sciences. The magnitude of the effect depends on person, product, and situation characteristics. b) Media violence is not the only, and likely not the most important factor contributing to aggressive thoughts, feelings, and behavior. Other factors include school, family, and peer influences as well as the availability of weapons.

Although this consensus is widespread among academic researchers from different disciplines (e.g., Psychology, Communication Studies, Pediatrics) and from different world regions, this interpretation of scientific evidence is a matter of ongoing debate. Theory and

empirical evidence is reviewed before the criticism on this majority consensus is briefly considered.

Media Violence and Aggression: Theory

A number of theories and concepts have been employed to deepen our understanding of the link between media violence and aggression. According to *Social Learning Theory* by Albert Bandura media characters may serve as models for aggressive behavior. Imitation of violent behavior is supposed to be more likely when aggressive models are rewarded (e.g., they obtain money, love, or respect). When aggressive behaviors are penalized (e.g., violent characters lose respect or get arrested) imitation of violent behavior is supposed to be less likely (see Bandura's original work for a comprehensive treatment on media effects from a social learning perspective).

A second approach is focused on *Desensitization*. Repeated exposure to media violence is supposed to weaken negative responses to violence such as anxiety, disgust or repulsion. As a consequence, real-life violence may appear more common and acceptable.

The concept of *Priming* suggests that violent media stimuli make aggressive thoughts more easily accessible. Thus, ambivalent situations and behavior by others may be perceived as aggressive and hostile. Moreover, aggressive thoughts may activate behavioral systems linked to aggression. Although Priming effects are short-term, they are supposed to contribute to longer-term effects.

Based on the *Excitation Transfer Theory* put forward by Dolf Zillmann, it has been assumed that violent media increase an individual's arousal which amplifies any emotional and behavioral tendency. The arousal is supposed to be unspecific, thus it may intensify anger and aggressive behavior or joy and non-aggressive behavior depending upon the context present after violent media exposure.

Much recent research on media violence is based on the *General Aggression Model (GAM)* which aims at integrating different theories to explain and predict both short term and

long term effects (Anderson & Bushman, 2002). Regarding short-term effects, the GAM is a process model that illustrates a) the *inputs*, and b) the *routes* through which these input variables are working in order to explain c) aggression-related *outcomes* which involve the interplay of appraisal and decision processes. In this model, violent media are considered aggressive cues that are part of the situation encountered. Other situational factors are the current levels of provocation, frustration, or pain. The situation variables are supposed to interact with person variables such as traits, values, or gender to determine the aggression-related internal state. Related research showed that violent movies are more influential when trait hostility is high rather than low, leading to more aggressive thoughts, more aggressive affect, and more aggressive behavior. Affect, cognition, and arousal are considered as the three routes that transfer input variables (situation and person) to aggression-related outcomes. According to the long run perspective of the GAM, the repeated use of violent media leads to aggressive knowledge structures, including aggressive beliefs and attitudes, aggressive perceptual and expectation schemata, aggressive behavior scripts, and aggression desensitization. These long-term effects are seen as changes in personality which in turn affect the *input* variables in a situational episode, as expressed in the short-term process model. Repeated violent game playing, for example, is expected to produce trait aggressiveness (person factor) and a situational context that fits this personality (e.g., change in peer group).

Media Violence and Aggression: Empirical Evidence

The main empirical evidence on the detrimental effects of media violence is based on survey designs or experiments. *Surveys* were employed to investigate the relationship between violent media use on the one hand and a person variable such as aggressiveness on the other hand. A large number of studies reported the results of data that were gathered at one point of time (*cross-sectional design*). The majority of available meta-analyses conclude that the more often individuals watch violent TV or play violent games, the more aggressive cognitions and

behaviors are reported (average effect size around $r = .20$, Paik & Comstock, 1994; Anderson, 2004). (See Encyclopedia entry by Fisher & Stuhlmacher on Meta-analysis)

Fewer studies reported the results of data that were gathered at two or more points of time (*longitudinal design*). In one of the most prominent longitudinal studies (Huesmann, Moise-Titus, Podolski, & Eron, 2003) researchers examined individuals who were six to nine year old children at time one (1977-1978) and asked them again when they were 21-23 years old (1993-1995). The authors found that children's amount of TV-violence viewing, children's identification with aggressive same-sex TV characters, and children's perceptions that TV violence is realistic predicted their adult aggression.

In order to investigate claims about the *causal* impact of media violence, *experiments* were conducted in laboratories and in the field. In these studies, the researchers typically prepare a violent media condition and one or more control conditions with lower violent media or no media use at all. Participants are randomly assigned to one of these groups. During and/or after media exposure participants' aggressive thoughts, feelings, or actions are assessed. Dependent variables may include the amount of aversive noise administered to a fellow participant in a staged educational setting (noise blast paradigm) or the number of aggressive actions outside the lab (e.g., during a game of hockey). Available meta-analyses on computer game use and TV use point at higher scores on aggressive outcomes for groups that were exposed to violent media as compared to the control conditions. Average effect sizes reported in meta-analyses vary between $r = .10$ and $r = .40$. Effect sizes tend to be smaller under more natural circumstances in the field than under more highly controlled circumstances in the lab.

Time-series field studies compare violence rates or any other data of interest before and after a specific mass mediated occurrence. This method has been used to estimate the impact of highly publicized news of a violent occurrence such as a kidnapping, a terrorist attack, or a suicide. There are only a few studies on the notion that news stories of aggressive

events affect imitative or “copycat” behavior. Evidence indicates that mass mediated suicides of celebrities (e.g., Marilyn Monroe, Kurt Cobain) may be a risk factor for imitative suicides. National authorities and organizations of journalists provide guidelines about how to report about a suicide (e.g., avoid details of suicide methods). Anecdotic evidence suggests that also a fictional character’s suicide may provoke imitation effects. The phenomenon of copycat suicides is sometimes referred to as the *Werther-effect*, based on a 18th century novel by J.W. Goethe.

Media Violence and Aggression: Criticism

Despite the widespread expert consensus that media violence is one substantial factor (among other factors) that contributes to aggressive thoughts, feelings, and behavior, the media violence-aggression link is still a controversial issue at least in the news, in popular science books, or in internet weblogs (see for example Freedman, 2002, for the critical perspective). Media violence research has been criticized for a number of issues. Prominent points of critique are: a) The dependent variables in the lab experiments have low external validity (e.g., the noise blast-paradigm); b) demand characteristics (i.e., participants’ expectations about how to behave) invalidate the results of many experimental studies; c) null-findings are obtained when aggressive crime is the dependent variable; d) correlational data is interpreted as a causal influence; e) effects are exaggerated, only highly vulnerable individuals are influenced by violent media, the great majority of viewers / users is not; f) the effect sizes are too small to have real-life relevance. It is beyond the scope of this article to elaborate on the media violence controversy. The majority of experts contend that the weight of the evidence for a link between violence and aggression is more compelling than the objections that have been associated with this research.

Other effects of Media Violence

Most of the research on violent acts in the media has focused on the question to what extent they may evoke similar thoughts, feelings, and behavior in the observer. However,

when violent acts are followed by harm, pain, and sadness of victims, audience members may process media violence from a victim perspective and not exhibit aggression.

Research in the tradition of the *cultivation hypothesis* found that heavy TV viewers overestimated real-world violence rates, they showed less interpersonal trust, and more fear of violence. The specific impact of real-world violence presented in non-fictional formats such as newspapers or TV news has also been investigated. Television coverage, for example, had a profound impact on children after the Challenger explosion, the first Gulf War, and the Oklahoma City bombing. The terrorist attacks on 9/11 have been related to clinically relevant fears and stress symptoms for individuals who had not been directly exposed to danger. Audience members may experience fear and stress after watching the news about incidents that happened in far-away parts of the world. Finally, another important avenue of research has explored the impact of violator ethnicity (e.g., African American) on thoughts, feelings, and behavior regarding this group.

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Additional Resources

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Key Terms

Media effects, computer games, TV, aggression, violence

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