

MEDIA VIOLENCE EFFECTS ON LEARNING

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Synonyms

Television violence, video game violence, film violence, music violence.

Definition

Exposure to television, film, video game, and music depictions of violence can lead to lasting changes in various knowledge structures.

Theoretical Background

Exposure to media (violent and nonviolent) has been linked with different types of learning. The General Learning Model (GLM) describes the processes by which variables, such as violent media, can produce learning (Swing, & Anderson, 2008). This includes not only content information in academic and professional contexts, but also learning behaviors and skills as well. For example, video game playing is associated with improvements in various visuospatial skills (Barlett, Anderson, & Swing, 2009).

Considerable research evidence also demonstrates that exposure to violent media (particularly television, films, and video games, but also music) increase aggressive behavior in both short and long-term contexts (Anderson et al., 2003; Anderson et al., 2010). Repeated exposure to violent media can result in changes to several types of knowledge structures that together constitute personality. Specifically, repeated exposure to violent media can lead to the development of aggressive behavioral scripts, perceptual and expectation schemata, aggressive beliefs and attitudes, and desensitization to aggression.

Research also shows that prosocial TV and video games can lead to learning and enactment of prosocial knowledge structures and behavior (Barlett & Anderson, in press).

Important Scientific Research and Open Questions

Additional research is needed in some areas. One concerns the potential for exposure to electronic media to result in attention deficits or executive control problems. This is of particular importance given the problematic nature of attention problems for educational contexts and the number of hours people spend on electronic media. There is evidence that viewing television in childhood and adolescence can lead to difficulties sustaining attention (e.g., Landhuis, Poulton, Welch, & Hancox, 2007). Another study suggests that violent and nonviolent television (but not educational television) are associated with subsequent attention problems (Zimmerman & Christakis, 2007). More recent research suggests that video game play detracts from some types of attention (Bailey, West, & Anderson, 2010).

More research is needed to discern whether media exposure causes attention problems, whether certain features of electronic media (e.g., fast pace, violent content) underlie deleterious effects on attention, and whether certain forms or features improve some types of attention.

Cross-References

References

- Anderson, C. A., Berkowitz, L., Donnerstein, E., Huesmann, L. R., Johnson, J. D., Linz, D., Malamuth, N. M., & Wartella, E. (2003). The influences of media violence on youth. *Psychological Science in the Public Interest*, 4, 81-110.
- Anderson, C. A., Shibuya, A., Ihori, N., Swing, E. L., Bushman, B.J., Sakamoto, A., Rothstein, H.R., & Saleem, M. (in press). Violent video game effects on aggression, empathy, and prosocial behavior in Eastern and Western countries. *Psychological Bulletin*,
- Bailey, K., West, R., & Anderson, C. A. (2010). A negative association between video game experience and proactive cognitive control. *Psychophysiology*, 47, 34-42.
- Barlett, C. P., & Anderson, C. A. (in press). Examining Media Effects: The General Aggression and General Learning Models. Chapter in E. Scharrer (Ed.), *Media Effects/Media Psychology*. Blackwell-Wiley.
- Barlett, C. P., Anderson, C. A., & Swing, E. L. (2009). Video game effects confirmed, suspected and speculative: A review of the evidence. *Simulation & Gaming*, 40, 377-403.
- Landhuis, C. E., Poulton, R., Welch, D., & Hancox, R. J. (2007). Does childhood television viewing lead to attention problems in adolescence? Results from a prospective longitudinal study. *Pediatrics*, 120, 532-537.
- Swing, E.L., & Anderson, C.A. (2008). How and what do video games teach? In T. Willoughby & E. Wood (Eds.) *Children's Learning in a Digital World* (pp. 64-84). Oxford, UK: Blackwell.
- Zimmerman, F. J., & Christakis, D. A. (2007). Associations between content types of early media exposure and subsequent attentional problems. *Pediatrics*, 120, 986-992.