

On-Screen Violence May Desensitize Teen Boys

BY JANE ANDERSON

FROM SOCIAL COGNITIVE AND
AFFECTIVE NEUROSCIENCE

Watching repeated violence on television and video and in movies can blunt emotional responses to aggression in teenage boys. This desensitization might, in turn, promote aggressive attitudes and behavior, according to a study published online.

tached to the subjects' skin to measure skin conductance responses.

Data from the MRIs and the skin conductive responses showed that the boys reacted less to the videos the longer they watched them. They also reacted less over time to the mildly and moderately aggressive videos, indicating that they had become desensitized to them.

The subjects also were asked to rate how much violence they saw on a regu-

lar basis in television, movies, video games, books, magazines, and Web sites. Those subjects who had the highest exposure to violence in their normal lives were the most desensitized to violence in the study, the authors wrote.

"As the boys were exposed to more violent videos over time, their activation in brain regions concerned with emotional reactivity decreased and that was reflected in the data from the functional

MRI and in the skin conductance responses," Dr. Grafman said.

Exposure to aggressive media results in a blunting of emotional responses, which might in turn prevent subjects from connecting the consequences of aggression with an appropriate emotional response. This, in turn, could increase the likelihood that the subject will see aggression as acceptable behavior, the investigators said. ■

VITALS

Major Finding: Repeated viewing of violent media content has the capacity to blunt emotional responses to aggression.

Data Source: Study of 22 healthy male adolescents aged 14-17 years, with no history of psychiatric or neurologic illness. All participated for financial compensation.

Disclosures: The research was funded by the intramural research program of the National Institutes of Health and the National Institute of Neurological Disorders and Stroke. No conflicts of interest were reported.

Reactions to aggressive media decrease with repetition, which could in turn prevent teens from relating aggressive actions to the consequences of those actions, according to the study.

"The important new finding is that exposure to the most violent videos inhibits emotional reactions to similar aggressive videos over time and implies that normal adolescents will feel fewer emotions over time as they are exposed to similar videos," Jordan Grafman, Ph.D., the senior investigator, said in a statement.

"The implications of this ... include the idea that continued exposure to violent videos will make an adolescent less sensitive to violence, more accepting of violence, and more likely to commit aggressive acts, since the emotional component associated with aggression is reduced and normally acts as a brake on aggressive behavior," said Dr. Grafman, chief of the cognitive neuroscience section at the National Institute of Neurological Disorders, Bethesda, Md.

The study enrolled 22 healthy male adolescents aged 14-17 years, none of whom had any history of psychiatric or neurologic illness. The subjects were paid to participate (Soc. Cogn. Affect. Neurosci. 2010 [doi:10.1093/scan/nsq079]).

The researchers used 60 mute video snippets, each 4 seconds long, which contained real scenes of aggression, such as fist fights, street brawls, and stadium violence. They divided the videos into groups of 20 depending on their levels of aggression: low, mild, and moderate.

Each subject quickly viewed all 60 videos, one after another, and judged whether each video was more or less aggressive than the one prior to it.

As the subjects viewed and rated the videos, the investigators used MRIs to measure changes in their lateral orbitofrontal cortexes. Electrodes were at-

IN THE TREATMENT OF SCHIZOPHRENIA

It's hard to know
what patients *really* do
with their medication

Adhering to a medication regimen
can often be a challenge for patients,
including those with schizophrenia.

Studies suggest that 25% to 60%
of patients may not take their
antipsychotic medication
as prescribed.¹⁻³

Is it time to look at your
patients differently?

Learn more at www.JanssenCNS.com

 **Janssen**
Division of Ortho-McNeil-Janssen
Pharmaceuticals, Inc.

References: 1. Gilmer TP, Dolder CR, Lacro JP, et al. *Am J Psychiatry*. 2004;161(4):692-699. 2. Becker MA, Young MS, Ochsorn E, Diamond RJ. *Adm Policy Ment Health & Ment Health Serv Res*. 2007;34(3):307-314. 3. Velligan DI, Wang M, Diamond P, et al. *Psychiatr Serv*. 2007;58(9):1187-1192.