



Screen violence shapes way young brains work

By Rachel Browne

Heavy exposure to screen violence in adolescence is changing the development of young people's brains, leading to increased aggression and reckless behaviour and decreased empathy.

Evidence presented at the Australian Council on Children and the Media conference in Sydney on Friday showed brain imaging studies which recorded the way violent material changes brain activation in the short term and brain function in the long term.

Experiencing screen violence reduces the development of the frontal lobe, which is responsible for impulse control and inhibits aggres-

sion, according to research presented by Dr Wayne Warburton, deputy director of the Children and Families Research Centre at Macquarie University. Exposure to violent material also activates the brain's limbic system, which is responsible for emotional response and memory. Dr Warburton said images of violence could be stored the way post-traumatic stress disorder patients store memories of trauma.

Violent films and games such as Grand Theft Auto activate the brain's right hemisphere, which controls negative feelings such as anger, jealousy and sadness.

The impact on the brain is cumulative, with the heavier the exposure, the more severe the changes.