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Marijuana Use Increases Violent Behavior

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New research published on-line in advance of print in the journal *Psychological Medicine*, concludes that continued use of cannabis causes violent behavior as a direct result of changes in brain function that are caused by smoking weed over many years.

Researchers have long debated a possible link between use of marijuana and violent crime. In contrast to alcohol, meth, and many other illegal drugs, the mellowing effects of cannabis seem unsuited to promoting violent behavior. However, ample previous research has linked marijuana use to increased violent behavior. The sticky problem in such studies are the many confounding factors involved in interpreting this correlation. It is very difficult to determine whether any statistical correlation between marijuana use and violent behavior are causally linked, or instead the two are associated through some other factor, such as socioeconomic status, personalitytraits, or many other variables that are related to the propensity to use marijuana. Moreover, the causal relation between smoking pot and violent behavior could be in exactly the opposite direction. That is, individuals who are involved in violence or who commit criminal offenses may also be people who are more open to using marijuana. After all, marijuana is an illegal substance in most places, so people with antisocial personality traits and those with tendencies toward lawlessness may be the type of individuals inclined to be more open to obtaining and using the illegal substance. Not so, conclude neuroscientist Tabea Schoeler at Kings College London, and her colleagues, "Together, the results of the present study provide support for a causal relationship between exposure to cannabis and subsequent violent outcomes across a major part of the lifespan." Let's examine the evidence provided by this new study.

What makes this new study more compelling than previous studies is that the researchers followed the same individuals for over 50 years from a young age to adulthood. This is precisely what one needs to solve the chicken or egg riddle with respect to cannabis and violence: just look and see which one happens first.

These subjects were in the Cambridge Study in Delinquent Development, comprised of 411 boys who were born around 1953 and living in working-class urban neighborhoods of London. 97% of them were Caucasian and all of them were raised in two-parent households. The researchers took into consideration other factors, including antisocial traits as assessed by the Antisocial Personality Scale, alcohol use, other drug use, cigarette smoking, mental illnesses, and family history.

Here's what they found: Most of the participants never used cannabis and they were never reported to have violent behavior. 38% of the participants did try cannabis at least once in their life. Most of them experimented with cannabis in their teens, but then stopped using it. However, 20% of the boys who started using pot by age 18 continued to use it through middle age (32-48 years). One fifth of those who were pot smokers (22%) reported violent behavior that began after beginning to use cannabis, whereas only 0.3% reported violence before using weed. Continued use of cannabis over the life-time of the study was the strongest predictor of violent convictions, even when the other factors that contribute to violent behavior were considered in the statistical analysis.

In conclusion, the results show that continued cannabis use is associated with a 7-fold greater odds for subsequent commission of violent crimes. This level of risk is similar to the increased risk of lung cancer from smoking cigarettes over a similar duration (40 years). The authors suggest that impairments in neurological circuits controlling behavior may underlie impulsive, violent behavior, as a result of cannabis altering the normal neuralfunctioning in the ventrolateral prefrontal cortex.

