

[New Study Fails To Support Past Claims About Marijuana And Brain Health](#)

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St. Louis, MO: Cannabis exposure [is not a cause of alterations](#) in brain structure, according to clinical [data](#) published this week in *JAMA* (Journal of the American Medical Association) *Psychiatry*.

Researchers from Washington University in St. Louis, the University of Missouri, and Kings College in London assessed the effects of cannabis exposure on brain volume in the hippocampus, amygdala, ventral striatum, and orbitofrontal cortex in groups of exposed and unexposed sibling pairs. Investigators reported that all of the volumetric differences identified "were within the range of normal variation," and that they were attributable to "shared genetic factors," not cannabis exposure.

Authors concluded, "[W]e found no evidence for the causal influence of cannabis exposure on amygdala volume."

The trial is "the largest study to date examining the association between cannabis exposure (ever versus never used) and brain volumes."

The study is one of two recent clinical trials to be published in recent months rebutting the claims of a widely publicized [2014 paper](#) which alleged that even casual marijuana exposure may be linked to brain abnormalities, particularly in the region of the brain known as the amygdala, which plays a primary role in the processing of memory, decision-making, and emotional reactions.

In January, researchers writing in *The Journal of Neuroscience* [reported](#) "no statistically significant differences ... between daily [marijuana] users and nonusers on [brain] volume or shape in the regions of interest" after researchers controlled for participants' use of alcohol. They concluded: "[I]t seems unlikely that marijuana use has the same level of long-term deleterious effects on brain morphology as other drugs like alcohol. ... The press may not cite studies that do not find sensational effects, but these studies are still extremely important."

*For more information, please contact Paul Armentano, NORML Deputy Director, at: paul@norml.org. Full text of the study, "Shared predisposition in the association between cannabis use and subcortical brain structure," appears in *JAMA Psychiatry*.*