

Teen pot use linked to later declines in IQ

By Malcolm Ritter & Nick Perry, Associated Press

August 27th, 2012

NEW YORK (AP) - Teens who routinely smoke marijuana risk a long-term drop in their IQ, a new study suggests.

The researchers didn't find the same IQ dip for people who became frequent users of pot after 18. Although experts said the new findings are not definitive, they do fit in with earlier signs that the drug is especially harmful to the developing brain.

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Study participants from New Zealand were tested for IQ at age 13, likely before any significant marijuana use, and again at age 38. The mental decline between those two ages was seen only in those who started regularly smoking pot before age 18.

Richie Poulton, a study co-author and professor at the University of Otago in New Zealand, said the message of the research is to stay away from marijuana until adulthood if possible. "For some it's a legal issue," he said, "but for me it's a health issue."

Pot is the most popular illegal drug in the world, with somewhere between 119 million and 224 million users between the ages of 15 and 64 as of 2010, the United Nations reported. Within the United States, 23 percent of high school students said they'd recently smoked marijuana, making it more popular than cigarettes, the federal government reported in June.

Young people "don't think it's risky," said Staci Gruber, a researcher at the Harvard-affiliated MacLean Hospital in Belmont, Mass. Gruber, who didn't participate in the new work, said the idea that marijuana harms the adolescent brain is "something we believe is very likely," and the new finding of IQ declines warrants further investigation.

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Experts said the new research is an advance because its methods avoid criticisms of some earlier work, which generally did not measure mental performance before marijuana use began.

"I think this is the cleanest study I've ever read" that looks for long-term harm from marijuana use, said Dr. Nora Volkow, director of the National Institute on Drug Abuse, which helped fund the research.

Ken Winters, a psychiatry professor at the University of Minnesota and senior scientist at the Treatment Research Institute in Philadelphia, said the new findings aren't definitive, but they underscore the importance of studying how marijuana may harm young people. He had no role in the work.

Meier and colleagues reported their work online Monday in the Proceedings of the National Academy of Sciences. It was funded with governmental grants from the United States and Britain, and a foundation in Zurich.

The study drew on survey data from more than 1,000 people in New Zealand, everybody born in the town of Dunedin during a year-long span ending in 1973. In addition to IQ tests, they were interviewed five times between ages 18 and 38, including questions related to their marijuana use.

Are you worried about your kids smoking pot?

1. No; They're good kids and wouldn't pick the stuff up
2. Sometimes; It's a concern, but we talk openly about the dangers of drugs
3. Yes; Have you been inside a high school lately?
4. Too late; my child already has a drug problem

At age 18, 52 participants indicated they had become dependent on marijuana, meaning that they continued to use it despite its causing significant health, social or legal problems. Ninety-two others reported dependence starting at a later age.

Researchers compared their IQ scores at age 13 to the score at age 38 and found a drop only in those who had become dependent by 18.

Those deemed dependent in three or more surveys had a drop averaging 8 points. For a person of average intelligence, an 8-point drop would mean ranking higher than only 29 percent of the population rather than 50 percent, the researchers said.

Among participants who'd been dependent at 18 and in at least one later survey, quitting didn't remove the problem. IQ declines showed up even if they'd largely or entirely quit using pot at age 38, analysis showed.

The researchers got similar overall results for IQ decline when they compared participants who reported having used marijuana at least once a week on average for the past year. The researchers had no data on how much was used on each occasion or how potent it was.

Dr. Duncan Clark, a researcher at the University of Pittsburgh, said he's not convinced that mental decline is only in those who become dependent by age 18. He said the main lesson he

sees in the overall study results is that to preserve one's IQ, it's best to avoid marijuana entirely, no matter what your age.

The researchers also surveyed people who knew the study participants well at age 38. They found that the more often participants were rated as marijuana-dependent in the surveys over their lifetimes, the more memory and attention problems were noticed by their acquaintances over the previous year.