



### Notes from the Psychology Department:

## **Myth Busting Regarding the Use of Cannabis**

The de-criminalization of marijuana use in Canada and the simultaneous media attention given to specific therapeutic use of cannabis for a few medical disorders appear to have contributed to a number of myths about the use of this substance. Fortunately a scientific advisory council has produced 2 research reports to set the record straight. The first report was "What Canadian Youth Think About Cannabis" and the second report was "The Effects of Cannabis during Adolescence."

Some of the common myths that you may have heard need to be challenged due to the harmful and long lasting effects on the developing brains of adolescents. Consider the myths described below:

## MARIJUANA MYTHBUSTERS

#### Myth #1: Everybody is using Weed

**Evidence**: The vast majority of youth do not use marijuana. Less than 25% of youth between the ages of 15 and 19 in Canada were found to have used cannabis during the previous year in a study conducted in 2012-2013. Use did increase over the high school years with 5-10% of grade 12 students using on a regular basis.

#### Myth #2: Cannabis is Natural so it is Normal

**Evidence**: Studies show that the prolonged use of high-THC strains of marijuana can negatively affect the way the developing brain grows. The teenage brain is going through a significant pruning (refining) process and myelination that continues into the early 20's. Cannabis binds to cell receptors in the brain, causing alterations in brain function and structure which in turn effects cognitive and emotional performance. One can expect inferior reasoning ability, reduced school performance and a decline in decision making ability.

# Myth #3: Cannabis makes you a better and more focused driver

**Evidence:** Marijuana produces deficits in motor coordination and impaired attention and increases the risk

of motor vehicle accidents, especially when consumed with alcohol. Studies showed reduced control, lane weaving and poor tracking capacity.

# Myth #4: Cannabis is harmless and even good for my Mental Health

Research has shown that cannabis may trigger the onset of schizophrenia among those who have a genetic predisposition to the disease. The evidence has been replicated that the probability of a psychosis is increased by 2 or 3 times over for frequent users of marijuana at a young age. Furthermore, the symptoms of psychosis will come on at an earlier age and interfere with recovery.

Along with concerns about susceptibility with psychosis it has also been shown that there is an increased risk for depression in parallel with earlier start and frequency of use. Cannabis has also been shown to have links with the development of social anxiety and post traumatic stress disorder. Cannabis use is negatively correlated with academic performance and school completion in high school and university. One in 6 individuals who use cannabis in adolescence go on to develop a cannabis use disorder.



# Ontario Health and Physical Education Curriculum

Mental Health and Well Being concepts are woven through the

HPE curriculum. The curriculum was significantly strengthened in 2015 in response to Ontario's Mental Health and Addictions strategy.

The relationship between mental health and substance abuse is explicitly addressed starting in Grade 7. Revisions were made to strengthen learning about mental health, highlighting possible harm connected to concussions, mental health and addiction problems. Educators and parents will need to counter these specific myths about marijuana use. Learning about health risks does serve as a deterrent to marijuana use. ..........PJCarney