

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Most young people have used marijuana at least once.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Marijuana is natural so it cannot be bad for you.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Marijuana smoke contains tar and other cancer-causing agents.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Marijuana doesn't affect any brain processes.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

All marijuana is the same strength.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Marijuana impairs one's emotional responses.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

You can't overdose on marijuana.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

There are no serious penalties for possessing even small amounts of marijuana.

Influence in Action

A: MYTH

A lot of natural things are bad for you (poisonous plants). When you smoke marijuana it releases harmful substances into your lungs (CAMH, 2006).

Influence in Action

A: MYTH

69% of Ontario students (grade 7-12) have NEVER tried it (CAMH, 2006).

57.1% of Canadians ages 15 to 24 report having NEVER used marijuana in their lifetime (Health Canada, 2009).

Influence in Action

A: MYTH

The most psychoactive chemical in marijuana is THC. THC attaches itself to specific receptors, known as cannabinoid receptors. These receptors are found throughout the brain and once activated by the presence of THC, can interrupt the regular process that the receptors control (such as memory or concentration) (Kalat, 2009) making the brain work less effectively.

Influence in Action

A: FACT

Fact (CAMH, 2006)

Influence in Action

A: FACT

This is due to the fact that THC also affects the limbic system of the brain. This brain region directs one's behaviour and emotions (Kalat, 2009).

Influence in Action

A: MYTH

There is great variation in the strength of marijuana (CAMH, 2006).

Influence in Action

A: MYTH

Myth: It is illegal to possess marijuana in Canada. Most people convicted of possessing marijuana for the first time receive a fine or a discharge, but could still end up with a criminal record. A first-time conviction for possessing 30g or less could result in a 6 month jail sentence, a \$1,000 fine or both (CAMH, 2006 and Controlled Drugs and Substances Act, 2010)

Influence in Action

A: FACT

There are no THC receptors in the medulla, which is the part of the brain that controls one's breathing, heart rate and other vital functions, which are impacted in overdoses (Kalat, 2009). Therefore, one cannot overdose on marijuana.

Influence in Action

Q: FACT OR MYTH?

Marijuana is never useful.

Influence in Action

Q: FACT OR MYTH?

Marijuana use is not associated with mental health issues.

Influence in Action

Q: FACT OR MYTH?

I don't put salt on my food so I don't have to worry about how much salt I eat.

Influence in Action

Q: FACT OR MYTH?

There are unseen costs to eating salty foods.

Influence in Action

Q: FACT OR MYTH?

To find out what a food has in it you have to go on the internet.

Influence in Action

Q: FACT OR MYTH?

Music enhances linguistic skills.

Influence in Action

Q: FACT OR MYTH?

If you want to enhance a child's early childhood learning have them stop playing around with music and start developing their computer skills.

Influence in Action

Q: FACT OR MYTH?

House work is among the best ways to reduce the risk of dementia and Alzheimers.

Influence in Action

A: MYTH

Marijuana has been linked to the onset of schizophrenia (CAMH, 2006).

Influence in Action

A: MYTH

Synthetic THC is used as a prescription medicine for people with AIDS or those undergoing cancer treatments. It is used because it can relieve nausea and vomiting and can help the person regain their appetite (CAMH, 2006).

Influence in Action

A: FACT

About \$21 billion annually are the health care costs and loss of productivity costs related to heart disease. The sodium (salt) that we take in our food increases our risk of developing heart disease. (Heart and Stroke Foundation, Ottawa)

Influence in Action

A: MYTH

77% of the sodium consumed by Canadians comes from prepackaged, ready-to-eat foods. (Public Health Agency of Canada)

Influence in Action

A: FACT

Music, specifically song, is one of the best training grounds for babies learning to recognize the tones that add up to spoken language. (Source Dr. Sandra Trehub, University of Toronto, 1997)

Influence in Action

A: MYTH

All packaged foods come with a Nutrition Facts label. The table gives information on the amount of 13 core nutrients and calories in a measured amount of food (i.e. 100 grams). It also lists the percentage of the recommended daily intake (%DV) of each nutrient in the food (Health Canada, 2008).

Influence in Action

A: MYTH

A 21-year study of people, 75 and older, explored the effect different activities had on mental sharpness. Frequent dancing outperformed all activities offering the greatest protection against dementia -- a 76% reduced risk of dementia. Dancing even protected better than frequent cognitive activities like reading (35% risk reduction) or crosswords (41% risk reduction).

Source: Leisure Activities and the Risk of Dementia in the Elderly, New England Journal of Medicine (2003) -- <http://www.nejm.org/doi/full/10.1056/NEJMoa022252>

Influence in Action

A: MYTH

Music training, specifically piano instruction, is far superior to computer instruction in dramatically enhancing children's abstract reasoning skills necessary for learning math and science. Learning music at an early age causes long-term enhancement of spatial-temporal reasoning.

Source: Frances Rauscher, Ph.D., Gordon Shaw, Ph.D., University of California, Irvine, 1997

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Once a person reaches their teen years the structure of their brain stops changing.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

75% of youth in Ontario reported not having a binge-drinking episode in the previous 12-month period.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Teens are more likely than adults to misinterpret facial expressions of emotion.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

The number of Canadian youth drinking alcohol is going up.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Youth take more risks in groups than they do alone.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

The number of Canadian youth using cannabis is going down

INFLUENCE IN ACTION

Q: FACT OR MYTH?

The brain's basic anatomy can be refashioned according to the needs of its owner.

INFLUENCE IN ACTION

Q: FACT OR MYTH?

Adolescents are more sensitive than adults to alcohol's memory-impairing effects

Influence in Action

A: FACT

Source: Brant County Health Unit, Canadian Community Health Survey, 2007

Influence in Action

A: MYTH

The brain continues to develop throughout life and in particular shows a period of dramatic change during the teen years. In fact, a recent study conducted at Oxford's Department of Clinical Neurology demonstrated that the brain structure of young adults changed following only six weeks of training as jugglers. They showed a 5% growth in white matter in the part of the brain associated with reaching and grasping in a person's peripheral vision. White matter is the neural cabling that conducts electrical impulses throughout the brain and central nervous system.

Source: Oxford University: http://www.ox.ac.uk/media/news_stories/2009/091012_2.htm

Influence in Action

A: MYTH

Actually, there was a 9.1% drop in the number of youth, age 18-24 years, who had ever drank alcohol.

Source: Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) 2009
<http://www.hc-sc.gc.ca/hc-ps/drugs-drogués/stat/index-eng.php>

Influence in Action

A: FACT

Adolescents use the Amydala (fight or flight response) rather than the Frontal Cortex (used by older adults) to read emotions.

"...one of the things that teenagers seem to do is to respond more strongly with gut response than they do with evaluating the consequences of what they're doing." (PBS Frontline, Inside the Teen Brain, interview with Yurgelun-Todd)

Source: Deborah Yurgelun-Todd PhD, Harvard Medical School (2004)

Influence in Action

A: FACT

There was a 31.1% decrease in the number of youth, age 18-24 years, who had every tried cannabis.

Source: Canadian Alcohol and Drug Use Monitoring Survey (CADUMS) 2009
<http://www.hc-sc.gc.ca/hc-ps/drugs-drogués/stat/index-eng.php>

Influence in Action

A: FACT

In one study conducted the presence of peers more than doubled the number of risks teenagers took in a video driving game and increased risk taking by 50% among college undergraduates but had no effect at all among adults.

It's interesting that when youth were left alone to decide, the differences in level of risk taking between youth and adults pretty well disappear:

Source: Peer Influence on Risk Taking, Risk Preference, and Risky Decision Making in Adolescence and Adulthood, Gardner & Steinberg, 2005

Influence in Action

A: FACT

A recent brain study conducted by the University of London revealed that the hippocampus of London cab drivers was on average much larger than that of the general population. Since, one of the key functions of the hippocampus is to create and store mental maps, and cabbies rely heavily on their ability to recall locations from memory and navigate, they give their hippocampus a tough workout every day.

Source: University of London, Navigation-related structural change in the hippocampi of taxi drivers. E. Maguire

Influence in Action

A: FACT

A study conducted with young adults aged 21 to 29 found that intoxicated study participants could recall items on word lists immediately after the lists were presented, but they had greater difficulty recalling the information 20 minutes later. The younger participants were more affected by the alcohol than the older participants particularly around forming explicit memories about facts (i.e. names and numbers).
(Acheson et al. 1998)