

# Frequent cannabis use by young people linked to decline in IQ

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Professor Mary Cannon, Professor of Psychiatric Epidemiology and Youth Mental Health, RCSI. Credit: RCSI University of Medicine and Health Sciences

A study has found that adolescents who frequently use cannabis may

experience a decline in Intelligence Quotient (IQ) over time. The findings of the research provide further insight into the harmful neurological and cognitive effects of frequent cannabis use on young people.

The paper, led by researchers at RCSI University of Medicine and Health Sciences, is published in *Psychological Medicine*.

The results revealed that there were declines of approximately 2 IQ points over time in those who use cannabis frequently compared to those who didn't use cannabis. Further analysis suggested that this decline in IQ points was primarily related to reduction in verbal IQ.

The research involved systematic review and [statistical analysis](#) on seven [longitudinal studies](#) involving 808 [young people](#) who used cannabis at least weekly for a minimum of 6 months and 5308 young people who did not use cannabis. In order to be included in the analysis each study had to have a baseline IQ score prior to starting cannabis use and another IQ score at follow-up. The young people were followed up until age 18 on average although one study followed the young people until age 38.

"Previous research tells us that young people who use cannabis frequently have worse outcomes in life than their peers and are at increased risk for serious mental illnesses like schizophrenia. Loss of IQ points early in life could have significant effects on performance in school and college and later employment prospects," commented senior author on the paper Professor Mary Cannon, Professor of Psychiatric Epidemiology and Youth Mental Health, RCSI.

"Cannabis use during youth is of great concern as the developing brain may be particularly susceptible to harm during this period. The findings of this study help us to further understand this important public health issue," said Dr. Emmet Power, Clinical Research Fellow at RCSI and

first author on the study.

**More information:** Emmet Power et al. Intelligence quotient decline following frequent or dependent cannabis use in youth: a systematic review and meta-analysis of longitudinal studies, *Psychological Medicine* (2021). [DOI: 10.1017/S0033291720005036](https://doi.org/10.1017/S0033291720005036)

Provided by RCSI University of Medicine and Health Sciences

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