

## Exploring the Performance of Mason Workers in the Construction Industry: New Evidence from the Use of Cannabis at Work Site in a Field Experiment

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### Abstract

This research examined the effect of a regulated and controlled quantity of cannabis containing 1.2% THC on the performance of masons working on a construction site in a field experiment. 80 masons were selected for the experiment, i.e. 40 cannabis smokers (experimental group) and 40 non smokers (control group). The aim was to establish if there was a significant difference in the performance of the two groups. The experimental design was a two group design for independent samples. The participants were given each a sachet of water and a plate of food before the experiment. Thereafter, the experimental group was given each a wrap of cannabis containing 1.2% THC. A delay time of 30 minutes was allowed after smoking for the cannabis effect to peak. Thereafter, the 80 masons started work at the same time which involved the laying of blocks. A stop watch was used to stop the 80 workers from work at exactly 4 hours, and the number of blocks layed by each mason counted. The means and the t-test statistics were used to analyze the data. The result of the experiment indicated that there was a significant effect of cannabis on the performance of the masons, [ $t(78) = 5.79, p < 0.05$ ]. Thus, the masons who smoked cannabis (experimental group) performed higher than the nonsmokers (control group). This study provides new evidence that regulated intake of cannabis (1.2% THC) at doses below intoxication level can lead to high work performance in manual tasks.

**Keywords:** Job Performance; Motivation; Cannabis; Productivity; Construction Industry

### 1. Introduction

Exploring workers performance and how to improve and maximize it has been the bedrock of most organizations all over the world. This is because optimum performance guarantees the realization of the organizational goals, high profit margins, and the survival of the organization and her enterprise. Due to this, organizations have used various means and methods in the past and present to maximize

workers performance from threats of dismissal and termination, strict supervision to coercion, target setting, motivation, overtime pay and other allowances, promotion, productivity merit awards, prizes, recognition and so on as inducements to enhance performance. Viswesvaran and Ones [1] observed that these measures are good due to the fact that the continuous survival of any organization depends on the successful job performance and efficiency of the employees of the organization.

Whereas organizations are concerned with maximizing performance by utilizing legitimate motivational and acceptable strategies to realize high performance results, workers on their own part often resort to their own illicit practices to help themselves out in terms of human energy requirements needed for the accomplishment of the set goals. This has led artisan workers in construction sites to be highly involved in the use of hard drugs and illicit substances to sustain their strength in order to attain the desired performance levels and targets inspiteof the dangers such substances could pose on their general health conditions. This pattern of behaviour is usually rampant amongst these categories of workers who work on contractual, part-time, hourly, daily paid, and casual status because their remunerations are calculated based on the quantity of work performance attained.

## 2. Theory/Calculation

One of the most problematic aspects of workers life is psychoactive substance use and the related negative consequences. Researchers maintain that the uses of these substances are correlated with death, sexual assault, bodily injury, failure and general underperformance. Job performance is determined by workers cognitive abilities which if impaired by excessive substance abuse, will affect memory, judgment, co-ordination and comporment and overall job performance.

According to the 2004 National Drug strategy Household Survey, smoking the flowering tops or head of the cannabis plant in joint, bong or pipe is the most common way to ingest cannabis in Australia. Over three quarters (76%) of recent cannabis users surveyed stated that they used cannabis heads and 447 stated that they used cannabis leaf, less than one in five cannabis users reported using cannabis resin and only 5% reported the use of cannabis oil [2]. In 1998, less than one percent of recent cannabis users reported that they usually ingested cannabis orally [3]. Smoking cannabis is an effective method for THC to quickly reach the brain and exert the desired psychoactive effects [4]. When smoked, about half of the THC is inhaled and most enters the blood stream via the lungs [5]. Once in the bloodstream, THC travels to the brain very quickly. The psychoactive effects of cannabis begin within minutes of smoking and peak within half an hour [6].

Cannabis is a very common drug, richly available in most places, and widely used by all kinds of people of all ages. It is also the most frequently used illegal drug in the workplace. Three out of 10 workers who test positive for drugs at work test positive for marijuana [7]. Eberhing J and Jagust W [8] found that since marijuana reduces co-ordination, affects concentration and makes users forgetful, it affects perception of time and space. These effects can lower productivity, cause people to make mistakes, lead to poor decision making, and make it unsafe to operate machinery and other hazardous equipments or to drive a vehicle. So an employee who smokes on the way to work or

during a lunch break could be impaired for at least a portion of the workday.

Many cannabis smokers also have performance related problems. This behavioural pattern in the personal backgrounds of marijuana-smoking employees was associated with negative attitudes towards work and job performance [9]. On the job, the negative fallout of substance abuse include a steady deterioration in work performance, unreliability and recklessness that can jeopardize the safety of co-workers, the integrity of company products and services and the company's reputation. Substance abuse in the workplace is a real and dangerous problem, one that every employee must understand and take seriously [10].

Steven Jaffe [11] considered the effect of cannabis onvisual distortion and job performance. These include skewed object size, distance and colour. Decreased concentration, detection, recognition and analysis of peripheral visual field light stimuli were reported. This visual distortion and perception problems were especially troublesome for the marijuana-intoxicated workers. Motor performance was further compromised by the drug intoxication state, which could induce a pleasurable sense of floating, the loss or distortion of the sense of time and failure to calculate proper distance or breaking time (in case of driving or operating heavy machines).

Results from the 2009 Canadian Alcohol and Drug use Survey have indicated that 11.4% of Canadians overall and 33% of those aged15-24 years used cannabis at least once in the previous years. Rates of driving under the influence of cannabis have also risen in recent years. National data collected in 2004 indicated that 4% of Canadian adults reported driving within one hour of consuming cannabis, up from 1.9% recorded in 1996-1997. A roadside survey of 537 drivers in Scotland reported that 15% of respondents aged 17-39 years admitted to having consumed cannabis within 12 hours of driving a vehicle. European Monitoring Centre for Drugs and Drug and Addition [12] found that between 0.3% and 7.4% of drivers tested positive for cannabis from roadside surveys in the United Kingdom, Denmark, the Netherlands, Norway, the United States and Australia.

Research has also shown that marijuana's negative effects on attention, memory and learning can last for weeks after the acute effects of the drug wears off [13]. Consequently, some who smoke marijuana daily may be functioning at a reduced intellectual level most or all the time. Marijuana users themselves reported poor outcomes on a variety of life satisfaction and achievement measures. One study compared current and former long-term heavy users of marijuana with a control group and despite similar education and income backgrounds, significant differences were found. Fewer of the heavy users of cannabis completed college, and more had yearly household incomes under \$30,000. When asked how marijuana affected their cognitive abilities, careers (jobs), social life and physical or mental health, majority of the heavy users reported that the drug had negative effects on all of these measures [14].

Several studies have linked workers' cannabis smoking with increased absence, tardiness, accidents, workers compensation claims, and job turnover. For example, a study among postal workers found that employees who tested positive for marijuana on a pre-employment urine drug test had 55% more industrial accidents, 85% more injuries and a 75% increase in absenteeism compared with those who tested negative for marijuana use [14]. Fergusson et al. [15] also demonstrated a relationship between higher levels of cannabis use and greater welfare dependence, unemployment and lower relationship and life satisfaction. O. Malley and Johnson [16] study has also shown that cannabis adverse impact on memory, learning, skill distortion can last for days or weeks after the acute effects of the drug wears off.

Furthermore, based on a study of 129 company workers, it was found that among heavy users of cannabis, those who smoked the drug at least 29 of the preceding 30 days had their critical skills related to attention, memory and learning significantly impaired, even after they had not used the drug for at least 24 hours. The heavy cannabis users in the study had more trouble shifting their attention and in registering, organizing and using information than did the study participants who had used marijuana no more than three of the previous 30 days. As a result, someone who smokes cannabis once daily may be functioning at a reduced intellectual level all the time. Because cannabis impairs judgment and motor coordination and slows reaction time, an intoxicated person has an increased chance of being involved in and being responsible for accident at site i.e. industrial accident [16]. In fact, THC positive, particularly at higher doses, was about three to seven times more likely to be responsible for their accidents as compared to other technicians that had not used cannabis or other psychoactive drugs [17]. According to a major study of accident at sites victims in a regional trauma unit in Toronto, marijuana was the most commonly found drug in impaired workers [18].

In another study, Wayne Lehman [9] looked at how marijuana affected job performance. A series of surveys conducted among 4,000 municipal employees in four cities in the southwest indicated that 8% of employees had smoked cannabis in the past year, and a large percentage of these users had smoked in the past month. He found that employees who reported cannabis use were much more likely than nonusers to have arrest histories, low self esteem, high rates of depression, and friends who were deviant. This behavioural pattern in the personal backgrounds of cannabis smoking employees was associated with negative attitudes towards work and job performance, workers were not committed to the organization, had less faith in management, and experienced low job satisfaction. These workers reported more absenteeism, tardiness, accidents, workers' compensation claims and job turnover than nonusers [9].

In a laboratory study at NIDA's addiction research centre in Baltimore that controlled for alcohol's

confounding effect, Heishman tested cannabis effects on the functional components of driving. Study subjects smoked a cannabis cigarette, waited 10 minutes, and then smoked another cigarette. Both cigarettes contained either 0, 1.8 or 3.6 percent THC. Twenty minutes after smoking the cigarettes, the subjects were given a standard sobriety test similar to a roadside sobriety test. The test showed that marijuana significantly impaired their ability to stand on one leg for 30 seconds or touch their fingers to their nose. As the dose of THC increased, the subjects swayed more, raised their arms and had to put their feet down in an attempt to maintain their balance. Subjects also committed 25 times more errors when they attempted to touch their nose with finger. The data from these laboratory studies showed that cannabis impaired balance and coordination of functional components important to driving in a dose related way [19].

According to health and medical research National Institute [20], in a similar measure of performance, 65 college students who smoked cannabis regularly were compared with 64 who smoked occasionally. The neuropsychological testing revealed deficits among heavy users that included problems in executive functioning, attention, new word learning and verbal fluency. These deficits were sustained beyond intoxication and were observable during supervised abstinence.

Marlatt and Vandebos [21] studied approximately 400 cannabis users (use from 6 months to 25 years) over a 10 years period to determine the effects of cannabis on cognition processes. They described a cannabis-state dependent set of cognition processes that resulted in a cannabis-specific mental and behavioural profile. Subjects demonstrated weakness in analytic and synthetic skills, difficulty sorting and classifying information correctly, poor concentration and weakness in psycho spatial skills, including differentiating time space. A recent study found that smoking cannabis had the effect of lowering of work commitment over the course of life [22, 23].

Couper and Logan [24] carried out a study on the effect of illicit drugs on driving performance. The fact sheets represented the conclusions of the researchers on the state of current scientific knowledge in the area of drugs and human performance. One of the conclusions reached was that marijuana impaired driving performance. Volkow [25] studied the adverse health effects of marijuana use. The researchers carried out evidence based review of acute and long term effects of cannabis on executive cognitive functions. Results indicated that cannabis had a profound negative effect on the executive cognitive functions of the subjects.

Amresh S, et al. [26] conducted a study on cannabis use and cognitive dysfunction. The review considered the effect of cannabis on cognitive functioning in both short term and long term. Although the general impression supported by many studies was that cannabis caused cognitive decline, some research suggests that this may not be so.

However certain aspects of cognitive functioning have been found to be affected by cannabis such as response time, prolongation of word viewing time, basic ocular motor deficit, residual verbal memory, and executive functioning. NIDA [27] did a study on the effect of inhaled cannabis on driving performance. The study involved the development of a protocol and driving environment that is sensitive to the effects of cannabis on driving performance by building on prior driving situations used previously for testing the effects of cannabis on driving. Results of the study showed that cannabis inhalation at high doses affected performance.

Lorenzo and Mikeal [28] researched on effect of cannabis on creativity. Some people thought that smoking cannabis made them more creative. However new research shows that the opposite is true. Smokers who ingested a low dose of THC or not at all (placebo) performed best in the thinking tasks that the test candidate had to carry out, compared to those who ingested high dose of cannabis. The findings showed that cannabis with a high concentration of the THC does not improve creativity. Mokrysz [29] carried out a study on the effect of marijuana on intelligence and school performance. The study found out that using marijuana moderately does not appear to affect intelligence or school performance. However heavy marijuana user's i.e. those who have smoked marijuana at least fifty times by age 15 tend to have slightly lower exam scores.

### **3. Statement of the Problem**

Many masons in today's society find comfort in smoking cannabis. A trip to construction sites reveal that a significant number of masons and other workers on construction sites smoke cannabis before, during and after work. Job performance at all levels has been affected by various factors including drug use/abuse, despite the fact that illicit drug use is prohibited by government agencies.

### **4. Purpose of the Study**

The purpose of this study was to find out if the use of regulated quantity of cannabis by artisan masons at the work sites do lead to higher performance or otherwise in relation to current literature on the adverse affects of cannabis consumption on the job performance of workers and other attendant health problems.

### **5. Hypothesis**

Artisan masons who smoked a regulated quantity of cannabis containing 1.2% THC will perform significantly higher than artisan masons who did not smoke cannabis in a block building task.

## **6. Material and Methods**

### **6.1 Participants**

Eighty (80) male participants were randomly selected from the general population. Their ages were between 18-40 years old. They were known masons who worked at construction sites within Uyo Metropolis. The eighty (80) masons were further divided into two separate groups of forty (40) each; masons who smoke cannabis and those who didn't smoke cannabis. One group of forty (40) masons that smoked cannabis formed the experimental group while the other forty (40) masons who did not smoke cannabis formed the control group for the experiment.

### **6.2. Instrument**

The data needed was collected through direct observation and counting of the number of blocks built by each of the participants within the stipulated time of the experiment (4 hours period). A job performance evaluation chart was used for recording the number of blocks built, stop watch for timing, pen, paper and scientific calculator, 40 wraps of cannabis containing 1.2%THC each, 80 sachets of water and 80 plates of food. The final scores used in this experiment were obtained through the counting of blocks set within the timing period (4 hours) and transforming the raw scores into percentage scores and mean scores.

### **6.3. Procedure**

The eight (80) participating masons were divided into two groups of forty each, to form the experimental and control groups. Each participant was given a plate of food and a sachet of pure water at the site to ensure that all of them have eaten before the start of work, to control some interfering variables. The researchers ensured that the experimental group earlier before the commencement of the experiment took no drug or psychoactive substances. Those that smoked one wrap of cannabis (containing 1.2% THC) were noted to form the experimental group while others that did not smoke after the breakfast formed the control group. Both groups were delayed to start work at exactly 10 am, 30 minutes after the intake of cannabis to ensure that peak effect of THC level has been attained. The blocks built were counted after four (4) hours from the start. The numbers of blocks were turned into percentage scores and the means of the two groups obtained. The experiment was to see if there was any effect of cannabis on job performance. This field experiment was carried out at the construction site as part of the workers daily work schedules.

## 6.4. Design

The experiment involved one independent variable (cannabis) and one dependent variable (job performance). Two groups design (between group designs) was therefore adopted.

## 6.5. Statistics

The independent student t –test statistical technique was used for data analysis, due to the small sample size ( $n \leq 40$ ).

**Table 1:** Summary of T-Test Results of the Job Performance of the Experimental Group (Cannabis Group) and the Control Group (Non-Cannabis Group)

| Variable                        | N                       | X —   | df | Cal t | Tablet | P                |
|---------------------------------|-------------------------|-------|----|-------|--------|------------------|
| 1 wrap of cannabis<br>(1.2%)THC | Experimental Group (40) | 40.45 | 78 | 5.79  | 1.6    | <.D5 significant |
| No cannabis                     | Control Group (40)      | 33.27 |    |       |        |                  |

The results of the research as presented in table 1 revealed that calculated t (5.79) was greater than critical t (1.6) at  $P < 0.05$ , showing that the result was statistically significant. This meant that regulated quantity of cannabis (1.2% THC) had a significant effect on the masons' performance. The mean scores further indicated that masons who smoked cannabis ( $X=40.45$ ) performed better than masons who did not smoke cannabis ( $X=33.27$ ). The hypothesis that artisan mason workers who smoked a regulated quantity of cannabis containing 1.2% THC will perform significantly higher than artisan masons who did not smoked cannabis in a block building task was therefore accepted [ $t(78)=5.79$ ,  $P < 0.05$ ].

## 8. Discussion

The finding of this research has shown that artisan masons who took a regulated quantity of cannabis performed higher than artisan masons who did not take cannabis at the construction sites. This result affirms the fact that regulated quantities of cannabis led to higher job performance, especially for manual tasks requiring physical energy exertions. However, the finding of this study was not in agreement with previous studies carried out with respect to impact of cannabis on job performance. Most previous studies had maintained that cannabis smokers recorded low performance at work, absenteeism, tardiness and industrial accidents [9, 14].

The reason for those findings was because researchers only looked at the work performance levels of cannabis smokers and non cannabis smokers without due consideration to the quantity of THC such workers had

## 7. Results

The summary of T-test results of the job performance of the experimental group (Cannabis group) and the control group (Non – cannabis group) were presented in the following Table 1.

consumed, and so they came to the conclusion that cannabis smokers always performed lower than non-smokers in work performance and that their work life was always associated with absenteeism, tardiness, industrial accidents, health problems and all manner of ills.

However, the difference between this study and previous studies was that the quantity of cannabis given to the workers in terms of the THC component was controlled and regulated (1.2%). This regulation was necessary to avoid intake of the THC in excesses or high doses that might lead to intoxication, loss of memory and detachment from reality. This research finding therefore provides new evidence in research that cannabis taken in a controlled and regulated quantity can increase human effort and energy levels thereby making the worker perform extraordinarily better than he would have done without such inducement. That explained why the performance of artisan masons who smoked cannabis was higher than the performance of artisan masons who did not take cannabis in the field experiment.

Based on this new finding, Governments should consider making legislations to allow the consumption of cannabis at regulated quantities in order to enhance workers performance at work. This is because consumption of cannabis at low doses will not endanger the psychological and physiological wellbeing and health of the worker or make the worker intoxicated. On the other hand, rather than being harmful to the worker, it will only induce or spur the worker to reach the peak of his maximum performance by making more physical energy available to him, thus increasing his motivation and leading to a higher output or productivity.

Organizations that are allowed to adopt this method will achieve higher productivity within a shorter time than when the organization was operating at normal human energy levels. The best way to go about this if governments approve such legislation is to commission pharmaceutical companies to produce the cannabis drug in regulated low THC doses / milligrams for consumption instead of the raw, crude, unregulated and illicit form in which it is presently being consumed by workers.

Furthermore, it was observed that the pay of these artisans was scaled and measured such that the greater the quantity of blocks set, the higher the pay, i.e. their take home pay was tied directly to their actual performance. Therefore, due to the fact that each block set attracted a particular amount of money, the masons used any means to our work themselves in order to set as much blocks as possible within the work period in order to go home with a huge amount of money. As a result of this, many took to the use of hard drugs and illicit substances to generate more energy and strength to get the job done and obtain the

targets and results they desired. So where high performance and meeting of targets is the aim, especially in quantifiable productions, a regulated amount of cannabis allowed for workers who smoke cannabis could help to do the magic and realize the goals. This will however be subject to government regulations since new evidence of its use in this respect has emerged.

## 9. Conclusion

This research at least has shown inspite of all the negative evidence on cannabis effects, that cannabis taken in a regulated THC content can improve performance in the construction industry, especially for jobs that require physical energy exertions. This conclusion was based on the findings of the study whereby artisan masons who took cannabis containing 1.2% THC performed higher than artisan masons who did not take cannabis in a field experiment conducted at the construction site.

## References

1. Viswesvaran C and Ones DS (2000) Perspectives on models of Job Performance. *International Journal of Selection and Assessment*. Vol. 8(4): 216-226.
2. Australian Institute of Health and Welfare (2005) Statistics on Drug use in Australia. AIHW Cat No. [www.aihw.gov.au/WorkArea/Download](http://www.aihw.gov.au/WorkArea/Download).
3. Adhikari A (2000) Detailed Results o 1998 NDSHS .[www.parl.gc.ca/.../repfinalvo13-e.pdf](http://www.parl.gc.ca/.../repfinalvo13-e.pdf).
4. Castle David and Solowij Nadia (2004) Cannabis, Anxiety and Mood: 11 Acute and Sub acute Psychiatric Effects of Cannabis. [www.cambridge.org/us/academic/subject](http://www.cambridge.org/us/academic/subject).
5. Ashton CH (2001) Pharmacology and effects of cannabis: a brief review. *British Journal of Psychiatry*. 178: 101-106.
6. Martin W and Cone (1999) Cognitive Consequences of Cannabis use - Lund University. [iup.lub.lu.se/luur/download%3Ffunc%](http://iup.lub.lu.se/luur/download%3Ffunc%).
7. Evert D & Oscar-Berman, M (1995) Cannabis Psychological Effects of Chronic Heavy use: A controlled study *psychological Science*. [pss.sagepub.com/content/10/3/181.refs](http://pss.sagepub.com/content/10/3/181.refs).
8. Eberhing JL and Jagust WJ (1995) Imagine Studies of Aging, Neurodegenerative Disease and Alcoholism. *Alcohol Res World* Vol. 19 No. 4.
9. Lehman Wayne (1996) Effects of Marijuana: Impairs Driving Related Skills and Workplace Performance. NIDA Notes Index, vol. II, Number 1. [Archives.drugabuse.gov/NIDA Note/N](http://Archives.drugabuse.gov/NIDA>Note/N).
10. NIDA (1996) National Institute of Drug Abuse Notes. New York. Free Press.
11. Steven Jaffe (2005) Medical Marijuana and Adolescent Treatment: National Institute on Drug Abuse Research Report. [Hivdatf.files.wordpress.cm](http://Hivdatf.files.wordpress.cm).
12. EMCDDA (2008) Prevalence, Patterns and Trends of cannabis use. [www.emcdda.europa.eu/attachments.c](http://www.emcdda.europa.eu/attachments.c).
13. Schweinsburg AD, Brown SA, Tapert SF (2008) The Influence of Marijuana use on Neurocognitive Functioning in Adolescents. *Curr Drug Abuse Rev* 1: 99-111.
14. NIDA (2005) National Institute of Drug Abuse Research Report. New York. Free Press.
15. Fergusson DM and Boden JM (2008) Cannabis use and Later Life Outcomes. *Addiction* 103: 969-976.
16. Yvonne M Terry-McElrath, O' Malley Patrick M, Lloyd D Johnston (2008) Saying No to Marijuana: Why American Youth Report Quitting or Abstaining. *Journal of Studies on Alcohol and Drugs* 69: 796-805.
17. Ramaekers JG, Berghans G, Van Laar M, Drummer OH (2008) Dose Related Risk of Motor Vehicle Crashes after Cannabis Use. *Drug and Alcohol dependence*. [Gipuzkoagazteria.net/admingazteria/...](http://Gipuzkoagazteria.net/admingazteria/)
18. Addiction Research Foundation (2006) Alcoholism and Drug Addiction Research Foundation of Ontario: Research goals and Plans. *Annals of the New York Academy of Sciences*. Volume 237 pp87-97.
19. Heishman S (1996) Effects of Marijuana: Driving-Related Skills and Workplace Performance *Research Advances*. Volume II, Number 1.

20. INSERM (2001) Cannabis: Effect of Consumption on Health. Collective Expert Reports. [www.ncbi.nlm.nih.gov/ncBi>literature](http://www.ncbi.nlm.nih.gov/ncBi>literature).
21. Marlatt and Vanderbos (1997) Discuss Current Research into the Causes of Addiction, using Specific Examples. [www.markedbyteachers.com/university](http://www.markedbyteachers.com/university).
22. Pearson and Michell (2000) Cannabis: The Relationship between Personal use and use among Peers. [www.hawaii.edu/hivandwids/Neutraliz](http://www.hawaii.edu/hivandwids/Neutraliz).
23. Peritti-Watel Patrick (2001b) Heroine between Repression and Risk Reduction: How is Drug-Related Policies Perceived? Societescontemporaines I (No 41-42).
24. Couper Fiona and Logan Barry K (2014) Drugs and Human Performance Fact Sheets. Transport Research International Documentation (TRID) <http://www.nhtsa.gov/stat...25>.
25. Volkow ND, Baler RD, Compton WM, Susan RB Weiss (2014) Adverse Health Effects of Marijuana Use. New England Journal of Medicine 370: 2219-2227.
26. Amresh Shrivastava, Megan Johnston, Ming Tsuang (2011) Cannabis Use and Cognitive Dysfunction. Indian Journal of Psychiatry 53: 187- 191. Doi10.4103/0019.
27. NIDA (2014) Effect of Inhaled Cannabis on Driving Performance. Clinical Trials.gov identifier NCT 07620177.
28. Lorenza Calzato and Mikeal Kowal (2014) Smoking Cannabis Doesn't Make You More Creative, Study Suggests. Science Daily. Com /releases/ Psychopharmacology Doi: 10.1007/500213.
29. Mokrysz (2014) Marijuana Use May Not Affect Intelligence/School Performance. University Herald Daily News. [www.universityherald.com/articles](http://www.universityherald.com/articles).

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