Is Marijuana Use Safe?

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Modeled example for the final paper assignment

In recent years, many states have voted to legalize marijuana, both for medical and recreational uses, with other states possibly following suit in the future (Sanders, 2018). However, federal law still prohibits the use or sale of marijuana in the United States. With the recent decision by the Justice department to crack down on marijuana distribution in states with legalized marijuana (Johnson, 2018), the question returns of whether those federal laws have real medical science on their side, or whether they are relics of the politics of a bygone era (Ripley, 2017). This paper will begin to explore the specific question of whether marijuana use is harmful to health. It will present a strong argument that marijuana is relatively safe and a strong argument that it is unacceptably dangerous. This will be followed by an analysis of the merits of reasoning and support provided by each.

**Argument that Marijuana Use is Safe**

Premise 1: Many studies have been done on the safety of marijuana use, and pooling their data creates a large and reliable data set from which to determine the effects of marijuana usage (Grant, Gonzales, Carey, Natarajan, & Wolfson, 2003).

Premise 2: Pooling the data from studies on the effects of marijuana usage shows no significant cognitive impairment in reaction time, attention, language, executive function, perceptual function, and motor skills in marijuana users (2003).

Premise 3: Meta-data showed minor cognitive impairment from long term marijuana only in the areas of learning and memory, but these were minor and can be minimized (e.g., in a medical context) (2003).

Premise 4: Marijuana has beneficial uses that outweigh its minor harms (Wetterau, 2015).

Premise 5: If a substance has beneficial uses that outweigh its harms then its use is acceptably safe.

Conclusion: Marijuana use is acceptably safe.

**Support for the Argument that Marijuana is Safe**

A giant meta-study pooled data from many research studies of the effects of marijuana use and determined that marijuana use did not result in significant change in performance in six of eight cognitive areas (Grant et al., 2003). Because the study considered all relevant research studies and had a large data pool, these results can be considered reliable. Thus, there is substantial support for the first two premises of the argument.

The two areas in which there was a decrease in function, learning and memory, showed relatively minor effects, which could be mitigated, for example, in medical contexts. For example, the declines were the result of long term and/or recent use of marijuana. Casual users or medical users may not experience even those minor declines in performance (Grant et al., 2003).

There are many documented medical benefits from marijuana use, including for nausea, AIDS, chemotherapy, arthritis, inflammatory bowel disease, MS, and Huntington’s disease. The risks of harm from the use of a potentially addictive drug can be mitigated with proper precautions from a physician (Wetterau, 2015).

The fifth premise is difficult to prove specifically because of different possible interpretations of what it means for something to be ‘acceptably’ safe. However, various academic articles support the idea that marijuana’s level of risk is within acceptable limits. Some argue, for example, that it is safer than alcohol and even some foods (Americans for Safe Access, 2018), so if those substances are considered safe enough to be legal, then perhaps marijuana should be too.

Furthermore, one can weigh the harms of its use against the harms of its criminalization. One author, for example, reasons, “Given that marijuana's harms appear to be relatively small, though, advocates [argue](http://www.vox.com/2015/4/27/8500531/marijuana-legalization-commercialization-prohibition) that, even if legalization leads to more pot use, it's worth the benefit of reducing incarceration and crippling violent drug cartels financed in part by revenue from illicit weed sales” (Lopez, 2018). Therefore, one can reason, its use is safe relative to the harms of its prohibition, and therefore that constitutes an acceptable level of risk.

**Argument that Marijuana Use is Unsafe**

Premise 1: Marijuana is an addictive substance ([Volkow, Baler, Compton, & Weiss, 2014](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5102212/%22%20%5Cl%20%22C14)).

Premise 2: Marijuana use causes long term negative effects on physical and mental health (Feeney & Kampman, 2016).

Premise 3: Marijuana use causes elevated driving risks (Neavyn, Blohm, Babu, & Bird, 2014).

Premise 4: Marijuana use among adolescents is correlated with lower academic achievement, job performance, and social functioning (Palamar et al., 2014).

Premise 5: It is unsafe to use substances that are addictive and that have many negative effects.

Conclusion: It is unsafe to use Marijuana.

**Support for the Argument that Marijuana is Unsafe**

The first four premises of the argument are supported by studies indicating each of the effects in question. The degree to which these effects depend upon the quantity and duration of use, along with the age of the user and recentness of use is still an open question. However, the multiple studies cited do seem to support strongly the idea that the use of this substance can cause lasting harm.

The fifth premise links the facts given in the first four premises to the language of the conclusion. It shows that any substance that has the properties demonstrated in the first premises will qualify as unsafe, thus demonstrating the truth of the conclusion. Furthermore, the fifth premise makes a substantial point that weighs against even medical uses of the product. Though the consequences of strictly medical uses may be relatively minor, if a product is addictive *and* has harmful consequences, then users are likely to continue to use it beyond its medicinal value, resulting in long term harms (Wetterau, 2015).

The fact that there have been demonstrated risks associated with the use of marijuana indicates that researchers should caution against the legalization of the product, especially since its legalization could to lead to greater social acceptability and more widespread use, especially among teens. Seen in this light, these harms become quite significant and suggestion strong caution against the legalization and use of the substance.

**Analysis of the Reasoning on Both Sides**

As noted, both arguments have premises that are supported by substantial scholarly research. Both arguments additionally provide strong support for the truth of their conclusions. Each even includes a premise that links the factual claims made in the previous premises to the specific judgment made by the conclusion, resulting in powerful support for the truth of each conclusion. However, their conclusions make opposite points, resulting in an apparent contradiction. There is a good question, therefore, of how to determine which of these conclusions is most likely to be true.

There are several factors that can be used to explain this strong evidence for opposite conclusions. One is that authors, even authors of scholarly meta-studies, are frequently going to put more focus on studies whose results tend to support the conclusions that they personally support. Furthermore, each study will focus on factors that strengthen the case for its preferred side. For example, a scholar whose research supports the use of marijuana might focus on mitigating factors such as the fact that dosages can be carefully controlled in a medical setting. Researchers on the side of the opposition, on the other hand, may emphasize that addicted users are likely to use the substance in doses well beyond those recommended by physicians.

Given the fact that even scholars can approach such issues from biased points of view, it is difficult to arrive at one and only one ‘objective fact’ about whether marijuana use is acceptably safe or unacceptably dangerous. However, study of scholarly sources on both sides of this issue allows critical thinkers to be more aware of the types of risks and benefits and to be able to weigh the concerns for and against the use of the substance as objectively as one can. Use of non-scholarly sources, by contrast, can lead one to partisan advocacy in which one is not as objectively aware of the substantive considerations on both sides of the question.

Having studies both sides of this question, my own evaluation of the research indicates that long term marijuana use, or use at a young age, can have deleterious health consequences. However, use by adults in the limited context of medical application can have benefits that render the risks acceptable (Grant et al., 2003). Furthermore, in a medical setting, the use is typically controlled, temporary, and supervised by a physician. Therefore, the level of risks in these contexts, especially when contrasted with those of many other legal prescription drugs, may fall within an acceptable range.

**Conclusion**

 It is common for people to be wedded to a position and to seek evidence only to support their side. However, in pursuit of truth, critical thinkers make a point of understanding the best arguments on all sides of important questions. This allows them to be more informed and also more fair-minded, open to changing their views to whichever position most aligns with the best evidence.

 Having researched the topic of marijuana use, I have found strong support for contrasting positions. On the one hand, there appears to be strong evidence for some potential harms associated with long term use of the substance. On the other hand, when it comes to medical applications, which tend to be short term and in which there are real medical benefits, these risks may fall within acceptable limits.

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