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## Decisions Project Analysis

### Decision Process to Determine Legal Status for Marijuana

This analysis will investigate the factors that may influence a state's decision to legalize weed or not. State governments make the laws regarding this legal concern. There are some debates about whether or not this matter should be a state or federal decision; However, this project will discuss the decision information relevant to the legal status of marijuana at a state level. The decision to legalize weed or not is a relevant topic because public opinion and legal decisions about legalizing marijuana have undergone a dramatic long-term shift since the 1980s and '90s (Pew Research Center, 2015). Apart from the Silent Generation (70-87), all generations have displayed an exponential increase in support for legalization over the past decade (Pew Research Center, 2015). Over half of American states (29) have either fully or partially legalized marijuana (DISA, 2022). The following table lists the status of legalization in each state:

#### *Cannabis Legal Status of U.S. States*

<b>Fully Legal</b>  (Recreational, Medicinal, and CBD oil are legal. Weed is not criminalized, however, laws and regulations are in place to maintain safety like traffic laws and age limits)	Alaska, Arizona, California, Colorado, Connecticut, District of Columbia, Maine, Massachusetts, Michigan, Montana, Nevada, New Jersey, New Mexico, New York, Oregon, Vermont, Virginia, and Washington (18)
<b>Fully Illegal</b>  (Nothing, not even CBD oily is legal)	Idaho, Kansas, Nebraska, North Carolina, South Carolina, and Wyoming (6)
<b>Recreational Illegal</b>  (Decriminalized but not legal for recreational use, only medicinal and CBD oil)	Deleware, Hawaii, Louisiana, Maryland, Minnesota, Mississippi, Missouri, New Hampshire, North Dakota, Ohio, and Rhode Island (11)

<b>Not Decriminalized</b>  (Medicinal and CBD legal, recreational use illegal, still criminalized without proper clearances and referrals)	Alabama, Arkansas, Florida, Georgia, Indiana, Iowa, Kentucky, Oklahoma, Pennsylvania, South Dakota, Tennessee, Utah, Wisconsin, and West Virginia (14).
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The primary alternatives discussed in this analysis include legalizing marijuana, prohibiting marijuana, and prohibiting recreational marijuana. These alternatives are listed below.

### Alternative Decisions

1. Fully Legal: When marijuana is fully legalized, all cannabis products including CBD Oil, medicinal marijuana, and for recreational marijuana are legal. Marijuana is also decriminalized unless laws regarding substance use are broken (e.g. Traffic laws).
2. Fully Illegal: Weed, including CBD Oil and medicinal marijuana, is illegal. Marijuana is criminalized in states where weed is illegal.
3. Prohibiting Recreational Use: The prohibition of recreational use of marijuana means that marijuana can be prescribed for medicinal purposes and CBD oil, although this does not mean that the use of marijuana is decriminalized.

There are concerns regarding the health, social, and legal implications of marijuana use, particularly the use of marijuana among adolescents. General information regarding marijuana provides insight into how the general public feels about marijuana. The feature that discusses teen use focuses on the main concerns regarding underage use of marijuana, including health and awareness. The health feature discusses the health risks of marijuana that not all may be aware of. The social and safety feature discusses concerns regarding traffic and other safety topics. These features are relevant because they concern society's overall well-being and how each decision may impact U.S. residents. We just recently are able to understand how the legal alternatives affects those features because only in the last 10 years or so have states legalized cannabis. The following table provides research on each key feature:

### Main Alternatives

<i>Key Features</i>	<i>General</i>	<i>Teen Use</i>	<i>Health</i>	<i>Social and Safety</i>
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<p><b>Legalizing Marijuana</b></p>	<p>-A majority of those who say marijuana should be legal say they've tried the drug before (65%), and 34% of those who support legalization say they've never tried marijuana (Pew Research Center, 2015).</p>	<p>-Increased ability to regulate the access and legal restrictions in adolescents or those under 18 and information regarding the risk and side effects of cannabis will be more readily available to educate adolescents about the health and safety risks of using weed (MPP, 2022).</p> <p>According to the National Survey on Drug Use and Health, Colorado teens between 12 and 17 reported a nearly 12% drop in marijuana use just two years after legal adult use (ProCon, 2018).</p> <p>-A study published in the Journal of the American Academy of Child &amp; Adolescent Psychiatry in 2011 found that the number of teens using cannabis — and the number with problematic use — is falling a</p>	<p>-No drug is harmless; however, studies show that cannabis is less harmful than alcohol or tobacco, both legal (MPP, 2022).</p> <p>-No conclusive research that weed causes brain damage or lowered IQ in general. It is a case-by-case circumstance (MPP, 2022).</p> <p>-There have not been any causal links between cannabis and mental health (MPP, 2022).</p>	<p>-Traffic death and arrests for DUIs have not increased with legalization (ProCon, 2018).</p> <p>-Legalized weed is regulated for consumer safety, and crime decreases with legalization (ProCon, 2018).</p> <p>-Most people in treatment for cannabis were ordered there by the criminal justice system (MPP, 2022).</p>
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<b>Prohibiting Marijuana</b>	<p>Among those who say marijuana should be illegal, 29% say they have tried it before, while 71% say they have not (Pew Research Center, 2015).</p>	<p>-Data shows that about 10% of those who use cannabis become addicted; this number is higher among adolescents (Wilkinson, 2013).</p> <p>-Many believe that legalization will likely cause an increase in teen use and more medical emergencies (ProCon, 2018).</p>	<p>-Other forms of marijuana can be used medicinally beyond smoking; however, smoking a form of marijuana use. There are concerns about the long-term effects of marijuana smoke on the lungs (Wilkinson, 2013).</p>	<p>-Marijuana impairs the ability to judge time, distance, and speed; slows reaction time and reduces the ability to track moving objects (Wilkinson, 2013).</p>
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<p><b>Prohibiting Recreational Marijuana</b></p>	<p>-While most Americans support legalizing marijuana, there are concerns about public use of the drug if it were to become legal. Overall, 62% say that if marijuana were legal, it would bother them if people used it in public; just 33% say this would not bother them (Pew Research Center, 2015).</p> <p>**As it currently stands, in most states where marijuana is legal, the public use of marijuana is illegal (Hansen, Alas, &amp; Davis, 2022).</p>	<p>-Decreases underage teen use in general (national average) but at the state level, the number of teens using weed in legalized states is higher than the national average (ProCon, 2018).</p> <p>-One study found that problematic use among adolescents aged 12 to 17 was 25 percent higher (a slight increase from 2.18 to 2.72 percent) than in states without legal recreational use (NYU Langone Health, 2019).</p>	<p>-A withdrawal syndrome has been described, consisting of anxiety, restlessness, insomnia, depression, and changes in appetite which were found to affect as many as 44% of frequent users, contributing to the addictive potential of the drug (Wilkinson, 2013).</p> <p>-Compared with cigarette smoke, marijuana smoke can result in three times the amount of inhaled tar and four times the amount of inhaled carbon monoxide (Wilkinson, 2013).</p>	<p>-Traffic death and arrests for DUIs did not increase with legalization on average, but the number of accidents and fatalities has increased but rose in Colorado and Washington (ProCon, 2018).</p> <p>-Magdalena Cerdá, DrPH, associate professor and director of the Center for Opioid Epidemiology and Policy in the Department of Population Health at NYU Langone Health “Our findings suggest that as more states move toward legalizing marijuana for recreational use, we also need to consider investing in substance use prevention and treatment to prevent unintended harms—particularly among adolescents” (NYU Langone Health, 2019)</p>
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## Biases Among the Features

Biases among the *Teen Use*, *Health*, and *Social and Safety* features will be explored.

We understand the System 1 brain to be more impulsive or readily active whereas the System 2

brain may take more time to consider alternatives. In others words, the System 1 of thought is more subconscious, whereas the System 2 of thought is considerably conscious (Psychology Today, 2021). The following discussion takes into account some of the research findings and compares them to the alternative decisions. These comparisons consider the possible biases that may occur regarding the certain kind of research relevant to each key feature. While we might feel compelled to allow our personal experience and initial consideration to dictate thought processes and decisions, it is important to consider more than one alternative and seek all of the research findings possible to support all options before making a decision.

**\*\*Disclaimer:** This table, nor the examples provided, is a fully intensive exploration or display of all of the biases and times where bias has occurred. The listed biases and corresponding examples are just a handful of some found in research conducted on this topic.

Major Alternatives	<i>General</i>	<i>Teen Use</i>	<i>Health</i>	<i>Social and Safety</i>
Fully Legal	Availability Heuristic	Anchor Bias	Confirmation Bias	Anchor Bias
Fully Illegal	Availability Heuristic	Confirmation Bias	Selective Seeking	Confirmation Bias
Prohibiting Recreational Marijuana	Confirmation Bias	Selective Seeking	N/A	Confirmation Bias

### *Bias in Legalizing Marijuana*

#### General and Availability Heuristic:

Those who say marijuana should be legal say they've tried the drug before (65%), and 34% of those who support legalization say they've never tried marijuana (Pew Center Research, 2015). This data presents a misbalance between people with personal experience with marijuana use and those who have not used marijuana. Those who have not used marijuana may conclude external forces such as relatives, close friends, and stories they have heard, creating an availability heuristic because of this lack of personal experience and potential lack of research done to support their opinion. Likewise, individuals who have tried marijuana might be basing their opinion solely on their personal experience without considering others' experiences or doing research on the topic.

#### Teen Use and Anchor Bias:

In legalizing weed, it is understood that there are regulation policies put in place, like for alcohol and tobacco, regarding the access and legal restrictions in adolescents or those under 21 in the United States (MPP, 2022); however it is essential to outline what these policies are going to look like and if they will be adequately enforced to ensure teen safety and not assume that because they will put in place in a way that adequately protects teens.

#### Health and Confirmation Bias:

No drug is harmless; however, studies show that cannabis is less harmful than alcohol or tobacco, both of which are legal (MPP, 2022). Although, cannabis is at least, based on research, no less harmful than alcohol or tobacco. This does not mean that cannabis does not have dangers that can be detrimental to one's health. The harms of cannabis are no less harmful than other legal substances. However, this does not mean one should give into confirmation bias and take this information as weed is "totally fine" and can be used by anyone without caution. Further research must be done.

#### Social and Safety and Anchor Bias:

Current research states that traffic death and arrests for DUIs have not increased with legalization (ProCon, 2018). We must not fall subject to anchor bias and assume that there have not been observed changes that this won't change in the future. It is important to monitor these statistics and consider them.

#### *Bias in Prohibiting Marijuana*

#### General and Availability Heuristic:

Among those who say marijuana should be illegal, 29% say they have tried it before, while 71% say they have not. There is a large gap between individuals who have tried and those who have not tried marijuana (Pew Research Center, 2015). Those who have tried marijuana and believe it should be illegal may be drawing from their own negative experiences with marijuana. They also have not performed adequate research on the benefits of marijuana or the statistics that show marijuana is not any worse than alcohol or tobacco. Those who have not tried marijuana believe it should be illegal are likely to draw an availability heuristic. These individuals are most likely developing an opinion based on the negatives of marijuana covered in the news or the stories they have heard. Adequate research has most likely not been performed regarding the benefits of marijuana or the statistics that show marijuana is not any worse than alcohol or tobacco. This is not to see that marijuana is not dangerous in its ways or holds no negative effects. All drugs have their drawbacks; however, research regarding all aspects of this topic should be considered.

#### Teen Use and Confirmation Bias:

One source has hypothesized that as more states legalize medical and recreational marijuana, risk

perception is expected to decrease, causing the prevalence of use among adolescents to rise. (Wilkinson, 2013). Confirmation bias is present with the concerns regarding the perception of the risk of marijuana use in teens because it is expected to increase. Another study found the number of teens using cannabis — and the number with problematic use — is falling as more states legalize or decriminalize cannabis (MPP, 2022). Furthermore, it is likely that with legalization, information regarding the risks and side effects of cannabis will be more readily available to educate adolescents about the health and safety risks of using weed (MPP 2022) which will increase the teen perception of the risk involved with using marijuana. Many studies have found results that are contradictory to each other. There is a large gap between when each study was conducted. It is important to seek the most recent information regarding this topic.

#### Health and Confirmation Bias:

Early studies conducted on the suggested cognitive decline associated with marijuana use have been criticized for seemingly only confounding to differences in socioeconomic status; however, the study's findings present reliable findings between cognitive decline and marijuana use. These findings were supported by prior studies (Wilkinson, 2013). It is wonderful to see researchers keeping each other in check to ensure that the research being conducted explores all aspects of the topic. In research studies, though, it is likely that confirmation bias and selective seeking occur simply based on research scope. Although it is not an intentional outcome, it is important to be aware of the likelihood of that happening.

#### Social and Traffic and Confirmation Bias:

Research finds marijuana impairs the ability to judge time, distance, and speed; it slows reaction time and reduces the ability to track moving objects (Wilkinson, 2013) which is a significant concern for the safety and traffic concerns; however, this information does not necessarily confirm that there will be safety or traffic concerns just because of these side effects. This is not to say that these side effects do not deter the idea of someone under the influence of cannabis as a safety and traffic concern; however, other research regarding the traffic and safety statistics related to cannabis must be explored to confirm this consideration lest risk falling subject to confirmation bias. It is important to consider states that had enforced regulations, age limits, and traffic laws when marijuana was legalized.

#### *Bias in Prohibiting Recreational Marijuana*

#### General and Confirmation Bias:

While most Americans support legalizing marijuana, there are concerns about public use of the drug if it were to become legal. Overall, 62% say that if marijuana were legal, it would bother them if people used it in public; just 33% say this would not bother them (Pew Research Center, 2015). Those concerned about public use may not have researched much into the policies that would help regulate the concerns around public use. Furthermore, the research that might have



been conducted might have only been done to confirm their concerns about the public use of marijuana. As it currently stands, in most states where marijuana is legal, the public use of marijuana is illegal (Hansen, Alas, & Davis, 2022). Marijuana use can be regulated.

#### Teen Use and Selective Seeking:

In February of 2017, it was reported that in Colorado, the use of cannabis in adolescents had not changed since legalization and was nearly identical to the national average (MPP, 2022). Later on, in research, another article states that in 2018, the legalization of marijuana saw a decrease in the national average of teen marijuana use but the number of teens using weed in legalized states is higher than the national average (ProCon, 2018). It is important to stay up to date on the latest research because, as we can see, averages change. Furthermore, data such as this may be selectively chosen or skewed to support either side of marijuana legalization that may be presented without seeking other information. Selective seeking may not occur consciously, but it is something to consider.

#### Health and Bias:

There are no current biases found in research regarding the health concerns of recreational cannabis or cannabis in general. After all, no drug is harmless (MPP, 2022), and it is vital we take the health concerns seriously by continuing to complete research on these concerns while monitoring for bias.

#### Social and Safety Confirmation Bias:

Traffic death and arrests for DUIs did not increase with legalization on average, but the number of accidents and fatalities has increased but rose in Colorado and Washington (ProCon, 2018). It is important to consider beyond what is happening in other states. If the purpose of the presented research is solely to deter from other research considerations, the research being conducted may be a case of confirmation bias. The research must be done to consider what may happen if cannabis is legalized but not necessarily decide what is best for the state. This should take into consideration what is happening within the state considering legalization.

**\*\*It is important to note that the decision regarding the legalization of marijuana must be based on up-to-date information and considerations made beyond personal knowledge and experience. It is also important to make the basis of the decision based on what is currently best for the state. Something occurring in one state may not be applicable in another, but that does not mean the research or statistics should be discounted.**

#### **Solutions**

The basis of this project has surrounded a common theme that more research is needed (see biases discussion). However, this does not mean that the decision covering whether or not

marijuana should be legal or not is inconclusive but rather that the information that is currently available can change. Regarding a solution for this problem, given the information presently available, the following suggestions have been made based on the concepts of intelligence, creativity, and personal recommendation:

#### Intelligence:

Intelligence is understood as the ability to adapt, shape, and select an environment, but it can also be designed or invented (Sternberg, 2014). Based on this consideration, in relevance to the information provided in this analysis regarding the decision of marijuana legalization, the most intelligent decision would be to decriminalize marijuana across all states. Research shows that marijuana is, in contrast, no more harmful than alcohol or tobacco. Therefore, there is no reason for anyone to suffer criminal sentences simply for possession or use that has not caused any harm to the health, wellbeing, or safety of others. Underage use, however, is a much more critical matter. Still, again, instead of criminalizing these individuals, it would be much more beneficial to educate them and ensure they can receive the help they may need. The long-term goal of this argument is to push toward the legalization of marijuana in all states. Still, it must be considered that not every state is ready to legalize it in a safe and regulated environment. Until then, CBD oil and medicinal marijuana should be legalized for those who benefit from them. The clearance procedure must be well-monitored and regulated to ensure the smooth transition of legalization.

#### Creativity:

Creativity requires a new perspective separate from traits or talent (Amabile, 2012). Instead, creativity is something that is developed and maintained. It is not something that just happens; it is not static. A creative approach to approaching a closer resolve for this topic would be implementing a program that provides a quarterly or twice a year opportunity to sign up and try marijuana in a safe and controlled environment. This might spark a change in public opinion. It would be interesting to see if this would change anything and influence the overall decision by states. Another creative approach would be to legalize it in every state, advertise the safety and health concerns, and see what happens. Although these are a couple of reasonably creative solutions, there is a solid need to disclaim the intelligence of these proposals. The innovative solutions are merely ideas to monitor and observe human behavior regarding weed use.

#### Personal Recommendation:

Based on the research completed, mainly that weed is less harmful than alcohol and tobacco, criminalizing weed is wrong. As discussed in the intelligent section, there is no reason for anyone to receive a criminal offense for possession. Like alcohol and tobacco, if something terrible happens that endangers the health and safety of other beings, that is a reason for concern and should be addressed appropriately. That said, weed should not be illegal. Medicinal marijuana has been helpful to many people. Concerns about recreational marijuana are valid. It can not be denied that there are health concerns regarding weed, just like any other substance

that alters the chemical balance of the body, but there are ways to implement policies and increase risk awareness. As discussed in the intelligent solution, not every state may be ready for full legalization; however, that is the direction every state should head.

The genuine concerns for health, safety, and social aspects should not be disregarded. Research needs to be conducted continuously. Not all states will legalize simultaneously, and the details regarding decisions made will look different from state to state. Information from other states will be a helpful guide, but this information may change over time, so it is essential for the state to adapt to its current situation. Prohibition and criminalization of marijuana will not hold. Again, weed is no more harmful than alcohol or tobacco; both legal. The best solution is to decriminalize weed and push for legalization. To avoid bias, research conducted must use reliable and honest method that considers all possibilities and angles of the topic. Checking back with previous works and well and keeping in mind the potential biases that may occur will help reduce bias in this research.

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