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Possible Effects of Legalization of Marijuana on the Economy and the Individual

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Abstract

The article examines the potential effect of marijuana legalization by highlighting the function's relationship with company activity, employment in the legal sector, and the impact of recreational use on the individual. The analysis achieves the concept through the engagement of multivariate regressions that use distinct industry codes that integrate different tests to highlight the effects of the potential link associating marijuana legalization combined with some of the impact the practice implements on economic functions. The analysis uses data from the North American Industry Classification System from the Bureau of Labor Statistics. The established research intends to engage results showing the proper influence marijuana legalization on individual factors, especially for patients and economic activity. The continuous growth of the industry and literature associated also assists in revealing that cannabis legalization maintains a substantial positive impact on employment, treatment of individual illnesses, and proper growth in associated firms and industries. The study also thrives on engaging in advancing research and analysis associated with marijuana legalization to show its immense potential and continuing positive effect on the economy and the individual. The thesis research remains dedicated to everyone who assisted me in gathering relevant information for my study. I also appreciate my education center and friends' advanced research on my topic.

Keywords

Legalization of Marijuana, Economy and the Individual

1. Introduction

The United States advanced negative representations, labeling, and restriction on cannabis beginning after 1906, with outright prohibitions taking effect in the

1920s through policies like the Marijuana Tax Act of 1937 or the Uniform State Narcotic Drug Act. Even though the official outlawing of cannabis in 1970 through the Controlled Substance Act (CSA), other jurisdictions and states like California continued to engage in conflicting policies compared to those implemented by federal law. Since California's Proposition 215 was established in 1996, marijuana legalization currently represents a topic of conversation on the national level, with all states discussing legalization nationwide. Marijuana legalization in the States is a topic that continues to serve as a crucial debating point for all parties involved. The study strives to demonstrate the positive and adverse effects of legalization of the practice using multi-dimensional perceptions associated by analyzing the economic and individual impacts of the practice around states with already legal marijuana licensing practices. Voters in California enacted Proposition 215 in 1996, the first state law to legalize marijuana for medicinal purposes. Since then, 22 additional states have approved some sort of medical marijuana legislation, and further states are likely to follow suit. The U.S. House of Representatives enacted the MORE Act on 1 April 2022, which would eliminate the federal prohibition on cannabis by removing it off the list of prohibited restricted substances. This is the second time the House has approved the bill. Cannabis is authorized for use by adults in 19 states and for medical purposes in 36 states. This law would eliminate the federal prohibition, but legalization would be left up to the states. The legal sector produced $25 billion in revenue in 2021, a 43 percent rise over 2020, and is projected to reach $65 billion by 2030.

The dissertation strives to highlight why marijuana legalization increases changes in aspects like the economy and individual factors of dependencies that carry possible health concerns, especially pronounced among young and adolescent users. Further research in the study also strives to highlight the benefits of legalizing medicinal marijuana by highlighting the existence of minor to no adverse effects associated with marijuana dependency regarding the established factors and functions.

Marijuana legalization in the States continues to advance through functions like social acceptance, increased availability, reduced cost, and perceptions associated with use contribute to the continuous adaptation of the practice as essential for the growth of the region's economy and individual wellbeing. Moreover, the initiation of legislation for passing marijuana laws in regions like Colorado contributes to increasing interest in participation and engagement from more people. The study also strives to highlight the effects of cannabis legalization, like increased cannabis use fueled by functions like experience seeking, risk-taking, and sensation seeking. The analysis of factors like sexual orientation strives to demonstrate the quadratic correlation of marijuana use on gender influenced by legalization functions through the implementation of the utilitarian and gateway theories to argue the benefits and challenges of marijuana legalization in the study. Implementing both qualitative and quantitative resources in the analysis

also helps in offering concrete functions supporting the suitability of marijuana legalization.

2. Hypothesis and Conceptual Model

Several hypotheses remained engaged in the study in light of prior research. First, legalizing marijuana would lead to an increase in marijuana use among college students as a whole. I predicted that underage students' total use would not significantly alter when broken down by age. On the other hand, older kids would utilize more. The relationship between marijuana use and age would be moderated by aspects of sensation seeking, experience seeking, and risk-seeking. Experience seeking would boost marijuana use among those over 21 after legalization, but it would not be a reliable indicator of use among those under 21.

Conceptual Framework
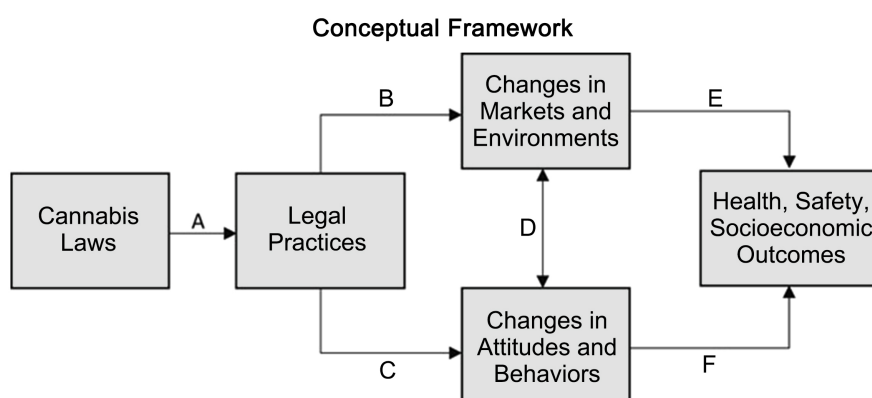
On the other hand, risk-taking would strongly predict marijuana use among underage students before and after legalization. The usage of marijuana would, after that, be moderated by sexual orientation. Overall, it would maintain a quadratic relationship; before legalization, marijuana consumption would differ significantly between heterosexuals and homosexuals, but there would be no difference after legalization. Finally, the relationship between marijuana use and marijuana legislation, especially among out-of-state students' desire to enroll in a Colorado university, also remains engaged throughout the study.

The conceptual framework integrated into the paper uses an effective and basic conceptual qualitative and quantitative approach to highlight, support and outline the topic thesis. Integrating an effective conceptual intervention helps the study focus on the main objective, facilitating a proper understanding of the effects and functions influenced by marijuana legalization. The conceptual approach in the analysis strives to second the hypothesis integrated into the analysis to highlight whether legalizing marijuana through medical and recreational use has positive effects associated with suitable economic and social advantages. Based on the concept, the analysis strives to analyze the impact of legalizing marijuana through economic and social activities. The model uses established and recognizable changes in the industry and social settings associated with factors

like personal effects, employment, and the number of businesses engaging in the market. Even though marijuana legalization represents a critical topic, the conceptual model uses a multi-dimensional approach to engage relevant evidence demonstrating the diverse ways such activity has on the U.S social, political, and economic environment.

The study also implements the conceptual framework as a suitable means of highlighting underlying issues associated with marijuana legalization. Hence, the analysis advances the interest and analysis of the numerous researchers related to the general perception of marijuana legalization in regions like California and Colorado to demonstrate any underlying positive and adverse effects. Moreover, the conceptual framework assists the study in highlighting disputes over marijuana in political, social, and economic factors. For instance, analysis of the political climate around marijuana legalization is one of many matters that Republicans and Democrats disagree on; the marijuana policy emerged as a significant issue in the 2016 presidential contest. On the other hand, analysis of social and individual factors influencing marijuana legalization shows that; even though legalizing marijuana represents a topic that most Americans are increasingly interested in, there is still a huge gap in data and actual research associated with the multi-dimensional functions associated with engaging such policies.

Such a thesis integrates an initial investigation point suitable for engaging in the study to determine whether the proponents of marijuana legalization result in favorable economic, social, and individual variables, such as rising employment, positive personal effects associated with consumption, and expanding enterprises inside state borders, remain accurate. It is also essential to note that, even though marijuana legalization is a growing topic in the States, maintaining congruence to local and state laws and policies is integral in ensuring that approaches engage and focus on integrating suitable and expected outcomes.

The analysis integrates three hypotheses:

1) Marijuana legalization continues increasing the population of drug consumers, either for medical or recreational use, especially among the youth.

2) Marijuana consumption after legalization remains highly moderated by the group of experience seekers and risk takers.

3) Sexual orientation associated with marijuana usage after legalization can remain correlated through quadratic aspects.

4) The study uses states with legal recreational and medical marijuana consumption practices like Colorado, California, Alaska, and Oregon to highlight the engaged functions and effects of marijuana legalization in the nation.

As highlighted above, there is a wealth of scholarly literature and research on predictions for the future and marijuana legalization politics. However, academic studies examining the real effects of marijuana legalization on the financial sector using empirical models concerning whether legalizing marijuana has evidence showing economy boosts among states need to broaden to offer concrete functions. The aspect is especially effective since current research concerning

state-to-state economic benefits show that different forms experience positive impacts while other experience increased taxes which cut into the positive economic effects of the industry. The study's economic, social, and individual impact of legalizing marijuana for recreational use remains modeled and analyzed.

The analysis also shows how legalization can help boost economic activities measured through individual development, employment, and company growth. To do this, two separate models remain developed, and differences in differences tests stay run between states with legalized marijuana for recreational use and those that have not, using data from both pre-and post-legalization periods. By tracking changes in the number of enterprises and employment in the core industry, the results can estimate the growth of the cannabis industry. Additionally, a second analysis remains implemented to compare the industrial growth among diverse states with legalization practices. As an approach to reinforcing the study topic, statistics about the marijuana sector remained gathered and engaged in the study.

The study highlights increased marijuana legalization in the U.S. and the engaged impacts. However, the essential components in the study focus on determining the individual and economic aspects associated with marijuana legalization. Using publicly available resources and policies, including those engaged by the federal government, helps to highlight the gradual growth and development of the sector in the nation. Additionally, since records concerning sales of recreational marijuana, the analysis engages already-established empirical analysis without the need to conduct any form of statistical tests concerning the variables associated with factors like tax income, economic aspects, and individual functions. Moreover, the paper implements suitable statistics from the Census Bureau's definition of an industry code to best describe, comprehend, and interpret marijuana legalization in the States. As a result, even though the implemented methodology falls short of highlighting the full effects of marijuana legalization on the economy and individuals, using secondary sources to integrate statistical analysis helps develop believable and significant causal associations in the sector.

The analysis uses individual principles and laws associated with information, policies, and figures associated with marijuana legalization in the U.S. For instance, the study uses research methodologies like identifying industries where the potential of finding suitable fits where marijuana would remain most effectively incorporated as a means of undertaking a suitable empirical study. However, based on the constraints and lack of relevant data collectively engaged concerning marijuana consumption in the nation, the analysis strives to advance practical information concerning the relatively new topic of marijuana legalization. For instance, comparing the social, economic, and individual changes associated with the practice through the six-digit NAICS industry code helps to highlight factors engaged by marijuana legalization. Moreover, the study also integrates resources like the Census Bureau to collect data concerning marijuana legalization and its effects on states with legal marijuana policies through the

treatment group. Furthermore, analysis associated with conditions without the legalization process helps the study to second the thesis statement by putting it to the test through the control group. Hence, the 6-digit code is the first empirical test used in the analysis, while the second test gets engaged and performed to check the correctness of the thesis in the study.

Participants in the case integrate various assessments for the behavior of marijuana use that include sensation seeking and marijuana laws' effects on non-residents' decisions to enroll in social settings like schools and states with legal marijuana consumption. The hypotheses remained examined using polyserial correlations, including analysis of variance, Pearson's Chi-square, negative binomial regressions, and negative binomial regressions. The findings use study groups like students to show that marijuana use continues to grow among all students, but more so among those over 21 ($p - 0.001$). There were no differences between use frequency before and after legalization ($p = 0.615$). Experience seeking is another variable implemented in the study to highlight a predictor associated with a past 30-day use by regression analysis ($p - 0.001; = 0.17$, $p - 0.001$). Overall, marijuana usage was predicted in the study through functions like legalization, the need for experiences, taking risks by minors, sexual orientation, and the influence of laws on decision-making. Such findings may remain suitable for informing other states involved in considering legalization and its effects on groups susceptible to higher marijuana use risks.

The conceptual framework also helps advance a focus on future research and the need to examine the longer-term effects of legalization and find effective interventions. The results may also aid in educating other states that are debating marijuana legalization about possible outcomes and demographic groups more vulnerable to marijuana usage. Through the implementation of such conceptual frameworks, the study looks to find effective therapies and suitable interventions for advancing effective marijuana legalization while highlighting the longer-term impacts, challenges, and positive effects of marijuana legalization. The North American Industry Classification System (NAICS), which classifies commercial establishments to gather, evaluate, and publish statistical data relevant to the U.S. economy, is also engaged in the study to generate all models integrating relevant historical data associated with each state. Other portions in the survey also talk about related policies that might result from marijuana legalization, like creating a new tax income stream, reducing government spending on marijuana prohibition, drug-related crimes, and marijuana banking.

3. Literature Review

Many state governments in the U.S. recently approved marijuana use for medicinal and recreational purposes. However, the challenges associated with legalizing marijuana at the federal level for medicinal and recreational purposes have continued to act as a controversial source in politics since the 1960s. The topic continues to gain popularity as a political, social, and individual issue worth

considering and tackling for effective integration. Contrary to previous social, political, and economic factors associated with marijuana legalization, parties like the Republicans, Democrats, and the public continue to advance the topic's relevance. Even though at times, such groups disagree on the economic, social, and individual benefits that legalizing marijuana would bring to states in terms of boosting employment and the enterprises operating among state borders in comparison to the social expenses and costs and potential medical, social, cognitive, and psychological effects marijuana might have, the study strives on highlighting the positive social, political, and individual impact of marijuana legalization of the nation.

3.1. The History of Marijuana Legalization in the U.S.

In 1996, California legalized marijuana consumption for medical purposes. Later, in 2012, Colorado followed the legalization procedure to represent the first state that legalized marijuana for medicinal and recreational use. According to the research by Yu et al. (2020), the Colorado Department of Public Health highlights that the practice of legalization strived to demonstrate marijuana taxation and sale as a suitable source for advancing overall state taxes, fees, and revenue. Research shows that states like California and Colorado continue to record excise tax funds from the marijuana sector suitable for use in supporting local projects like the construction of schools and community centers. Analysis of other regions like Washington State shows that marijuana legalization in such areas results in the experience of similar trends associated with consumption and revenue generation (Yu et al., 2020). Moreover, the Drug Policy Alliance also highlights that information originating from the state Department of Revenue and the Liquor Control Board highlight that tax revenues and cash collected as an aspect contributing to marijuana legalization support the advancement of the function in at least 48 states in the nation.

The analysis of diverse states with legalization protocols shows increased tax revenues combined with reduced crime rates to demonstrate the overall positive effect of marijuana legalization. For instance, the Colorado Department of Public Health, responsible for the proper legalization of marijuana in Colorado, highlights those early results associated with the practice from continuous unity associated with the growth and engagement of the practice. Nonetheless, the analysis uses such functions and interventions as an approach to support interventions focused on reducing drug consumption and misuse through different functions. Cerdá et al. (2020) note that, according to the Drug Policy Alliance, marijuana legalization continues to assist states in implementing initiatives focused on treating and preventing substance abuse, conducting relevant research concerning the underlying effects of marijuana use, and educating the population, especially the youth, about drug use and consumption. Recent scientific and analytical research associated with the established challenges and effects of marijuana remains engaged in highlighting the real impact of marijuana legali-
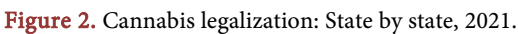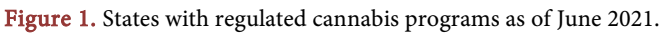
zation in the States. Hence, the framework engaged in the paper strives to highlight the effects associated with marijuana legalization by highlighting preferred approaches involved in the components of administration, fiscal management, demand, supply entries, and suitable governance of established structures.

The legalization of marijuana in the U.S. for all uses, including medical, recreational, and industrial, is a major social, economic, and political factor that has maintained strong support since 1906. Different policy-forming bodies at the state and federal levels continue to engage contradictory preferences concerning marijuana legalization. On the one hand, bodies like the Uniform State Narcotic Drug Act, passed and enacted by 35 states and formed in 1934, represented one of the initial bodies that began enforcing marijuana prohibition laws to represent the United States government. The primary role of the activities aimed to replace ineffective and unclear state laws concerning cannabis use combined with the assessment of the spread and growth of illegal narcotics in the country. As a result of the act, implementing other policies like the Marihuana Fee Act of 1937 continued to place increased restrictions on marijuana use (Cerdá et al., 2020). The act strives to make it illegal to possess cannabis without paying a particular tax and receiving a license issued through the federal government.

3.2. Legalization through Acts

The Marihuana Tax Act remained in effect until it got overturned by the Leary v. United States case in 1969. Research shows that Congress repealed the act the following year by integrating the Comprehensive Drug Abuse Prevention and Control Act of 1970. Even though the policy recorded previously failed attempts, the United States Supreme Court decided to offer the federal government the jurisdiction to regulate and prosecute cannabis, especially associated with medical and recreational use. Examination of other cases that include the United States v. show that 25 states and the District of Columbia passed legislation legalizing marijuana for either recreational or medical use after the federal and state governments received jurisdiction for integrating policies associated with cannabis consumption (Hammond et al., 2020). For instance, since June 2016, once the state of Ohio legalized the use of medical marijuana under Section 5 of the Marihuana Act of 1937, more states have shifted their perceptions concerning marijuana legalization perceptions. Analysis shows that only eight states, including Colorado, Oregon, Washington, Alaska, California, Maine, Nevada, Massachusetts, and the District of Columbia, accepted legalizing marijuana for recreational and medicinal use as an assessment strategy.

Currently, marijuana legalization remains categorized into four distinct categories: limited, medical, recreational, and illegal. According to Curry (2019), the legalization of marijuana needs to engage the utilitarian approach in intending to decriminalize its association by arguing that engaging in the actions and habits contributes to an overall advantage and good. (Figure 1, Figure 2)

State Regulated Cannabis Programs

Limited adult possession and growing allowed. no regulated production or sales: DC

May 2022

Figure 1. States with regulated cannabis programs as of June 2021.

Figure 2. Cannabis legalization: State by state, 2021.

According to the White House's Office of National Drug Control Policy, marijuana use has remained prohibited since 1970 (Hammond et al., 2020). The argument engaged by the White House office concerning the prohibition is through claims that the Federal government exposes marijuana to similar rigorous scientific scrutiny and clinical trials engaged through the Food and Drug Administration (FDA). Hence, even though perceptions associated with legalizing marijuana committed by the White House officials continue to change and adapt with transitioning periods, advancing efficacy and safety calls for the application of new medications and comprehensive processes that still form contradictory effects and results associated with marijuana use.

3.3. Debates Associated with Marijuana Legalization

Debates concerning marijuana consumption in the U.S. remain "morally" wrong among states. According to research, opponent states of legalization demonstrate that legalization of the process can lead to psychological and medical problems for users, leading to the rigorous control of legalization in such conditions. However, increased use and a rise in marijuana use among people, particularly young people, worry about marijuana opponent states the most. For instance, based on the FBI's Uniform Crime Reporting (UCR) Program, analysis shows that of all drug misuse violation arrests made in the United States in 2014, at least 5.2% percent of the group got detained for the illegal selling or manufacturing of marijuana. Another 39.7% got detained on charges of marijuana possession (Larkin Jr., 2018). Also, according to data from the American Civil Liberties Union-Washington (ACLU-WA), marijuana arrests in the U.S. have continued to drastically increase since 1992 with a gradual increase in the number of recorded cases, especially with the consideration that other states already have legalized marijuana or are in the process of integrating such policies on the state level. According to Scheier & Griffin (2021), marijuana legalization contributes to increased consumption, especially among the youth. The authors argue concerning the role of the drug as a gateway to other drugs with more severe drug abuse, contributing to the need to highlight such challenges.

Further analysis by Larkin Jr. (2018) also highlights that almost half (44%) of drug-related arrests made each year in the U.S. remain associated with marijuana. The percentage of arrests associated with marijuana is a concept that the federal and state governments continue to debate for adequate comprehension of suitable approaches for engaging in effective interventions for mitigating such challenges. Research by Chay & Kim (2022) shows that attempts to first legalize medicinal cannabis among diverse states through products like CBD hemp oil represents an effective strategy for mitigating law violation challenges associated with marijuana arrest cases. Integrating resources like the Office of National Drug Control Policy to analyze the policy changes engaged and associated with marijuana concerns shows the importance of legalizing consumption to reduce unintended and unnecessary arrests, especially those related to medicinal mari-

juana. For instance, the integration of resources and data gathered by bodies like the National Institutes of Health under the U.S. Department of Health and Human Sciences helps the study to show the adverse effects associated with marijuana prohibition as a means of emphasizing the essence of marijuana legalization. Research by the Federal Bureau of Investigation and the Criminal Justice Information Services Division shows that marijuana probation in the U.S. has more consequences and costs than legalization.

The aspect remains essential, especially in highlighting consumption trends associated with the younger generation. Research by the U.S. Department of Health & Human Services shows that up to 25% percent of arrests made in 2019 comprised high school seniors and college students who now smoke marijuana daily (Chay & Kim, 2022). Analysis of probational processes integrated for alcohol consumption through bodies like the Washington University of Alcohol prohibition in the United States also assists the study in offering similarities concerning the effects of probational policies associated with drug consumption. Such policies demonstrate a long history related to historians and economists in evaluating the effectiveness of such policies and whether such prohibitions gain support or rejection from involved parties. By engaging the prohibition policies of the 1920s to assess marijuana prohibition, the study shows that economic and social changes continue to advance the effectiveness of marijuana legalization. Through the analysis of changing trends and the economic growth and development associated with the legalization of marijuana, the study finds that the consumption of medicinal and recreational cannabis contributes to further economic growth through increased revenue and employment, mitigating individual health challenges, and further engagement of the government in monitoring the industry through taxation and regulation.

3.4. The Economic Impacts of Marijuana Legalization

Analysis of the study's effects of alcohol prohibition policies on the economy helps offer a reflective perspective showing the potential positive impacts Marijuana can have on the economy. For instance, an analysis of economic aspects associated with the U.S. beverage market is a $354.2 billion industry's relationship with alcoholic beverages shows that the sector provides at least 60% of the revenues with at least $211.6 billion in sales (Pacula et al., 2022). On the other hand, numerous studies show that the marijuana market growth continues to advance room for advanced economic development. The research emphasizes that marijuana legalization appears to have a promising growth spurt in the upcoming years, even though the business might take time to mature, especially considering that some states do not support marijuana legalization.

Analysis of predictions made by various agencies associated with marijuana legalization shows that the market remains set to advance practical economic benefits from the industry. For instance, the Tax Foundation continues to engage salient arguments about the growing medicinal and recreational marijuana

market rate:

    1) The foundation notes that the legalization of Marijuana is set to produce at least $28 billion through tax revenues for the federal, state, and local governments in the next few years. The foundation also notes that a portion of $7 billion of the revenue originates from the federal level and comprises $5.5 billion in corporate taxes and $1.5 billion in income and payroll taxes.

    2) The foundation believes that revenue from legalized Marijuana is set to advance in percentage with the GDP. For instance, the marijuana market in the United States is worth $45 billion annually, or roughly 0.28 percent of the GDP, and it accounts for about 26 million pounds of marijuana consumption.

    3) State taxes associated with Marijuana that are similar to those in California, Washington, and Colorado could boost state tax revenues by $13 billion globally, with an extra $5 billion from regular sales taxes while excluding the black market.

Even though the economic projections made remain based on interviews, market assessments, and market research while considering the legalization of Marijuana in all 50 U.S. states, the States must implement practices for analyzing the underlying economic impacts of legalizing cannabis. However, the analysis by Steinberg et al. (2020) also calls for the implementation of a perspective of the partisan nature of the current American administration and its effects on marijuana legalization. Such perspectives offer an increased unlikeliness that Marijuana can get legalized in all states of the United States. Moreover, held perspectives and perceptions of the effects of Marijuana on individual health and social settings contribute to realizing inefficient economic effects experienced through marijuana legalization. Additionally, analysis from diverse claims regarding marijuana use increase among young people continues to engage considerably adverse concerns among many parents and other parties who shun the effectiveness of marijuana legalization (Steinberg et al., 2020). For instance, school-based specialists and analyses claim that the 20 percent increase in high school drug reports is closely tied to the 24 percent increase in middle school drug reports combined with the growing black market for marijuana products.

Additionally, the predictions made in the analysis do not account for the reality that a black market still exists or that other policy ramifications like cannabis banking might act as limiting factors in advancing the industry's ability to grow as predicted economically. Although empirical research and literature reviews associated with the connection between marijuana legalization and its effects on the economy continue to grow with the market advancement, some independent research and advocacy offer suitable analysis concerning the industry's economic impacts (Figure 3). For instance, Wang et al. (2018) note that the Marijuana Policy Group (MPG) performed research showing that the marijuana sector produced $2.39 billion in revenue and more than 18,000 jobs in Colorado alone after two years of marijuana legalization.
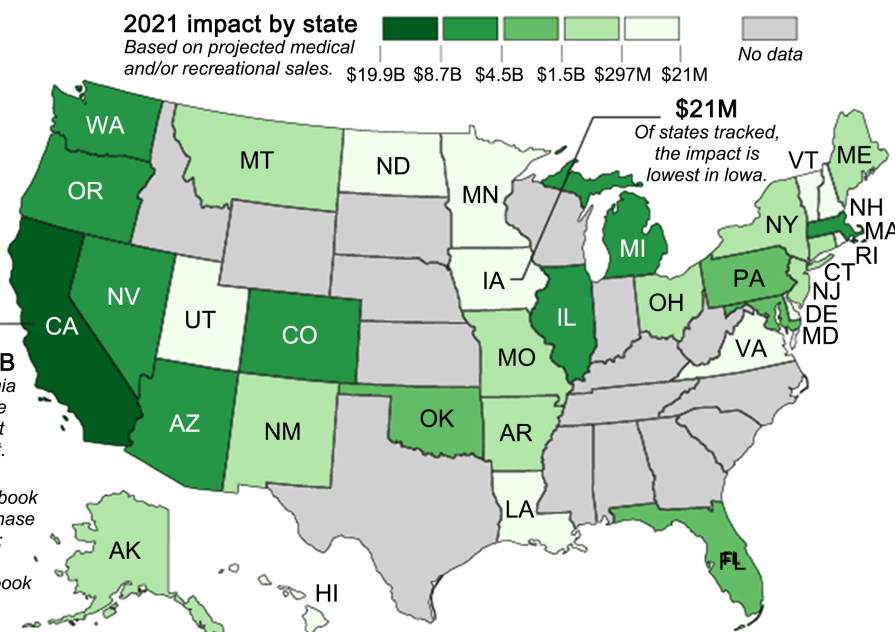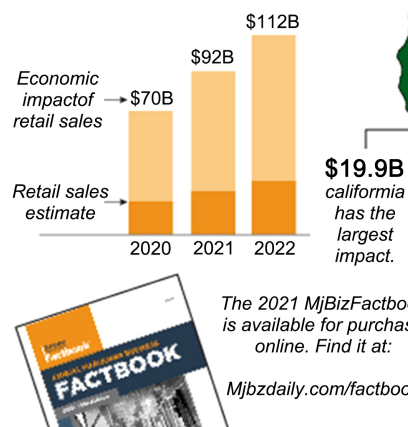
Furthermore, a unique model developed by MPG, highlighted as the Marijuana

Economic Impact of Marijuana

From jobs to taxes to real estate, the impact of the marijuana industry
has a large - and growing - impact on the broader economy.

US impact estimates

The economic impact of the marijuana industry is forecast to be $92 billion in 2021, according to estimates from the latest MJBizFactbook.

2021 impact by state
Based on projected medical and/or recreational sales.

$19.9B $8.7B $4.5B $1.5B $297M $21M   *No data*

$21M
Of states tracked, the impact is lowest in Iowa.

$112B

$92B

Economic impact of retail sales → $70B

Retail sales estimate

2020 2021 2022

$19.9B
califormia has the largest impact.

The 2021 MjBizFactbook is available for purchase online. Find it at:

Mjbzdaily.com/factbook

Source: MjBizFactbook, MjBizDally analysls

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Figure 3. Economic impacts of marijuana legalization.

Impact Model, predicts that by 2025, the demand for marijuana products is set to grow by at least 18% to represent the second largest growing source of excise tax revenue in states like Colorado to produce $121 million through excise tax revenues and combined sales (Yu et al., 2020). Moreover, projected Excise Tax Revenue for Colorado in Millions of Dollars in 2020 Cannabis Cigarettes Gaming with Lotteries and Alcohol in the Past 16 MPG contends that the effects of legalization will extend to other sectors of the economy. Some diverse sources impacted by the industry predicted by the model include production and cultivation in addition to retail, the subject of this report. Studies also show that the overall marijuana sales in Colorado in 2015 rose to $996 million, according to MPG. Moreover, MPG also notes that the cannabis business in Colorado is currently greater than theaters, sports arenas, and other economic sources like bakeries, grain farming, gas and oil wells, and coal mining. Such analysis shows that the marijuana industry is anticipated to surpass several established sectors by 2025.

3.5. Marijuana Legalization Implications on Individuals and Different Age Groups in States like Colorado

Cannabis usage among young adults around 21 and older is now legal in Colorado based on the legislation approved in 2012 and enacted in 2014. The ap-

proach represents a culmination of efforts to legalize Marijuana. Since the legalization process in Colorado was the first instance of recreational marijuana legalization in the United States, the effects of such a policy remained unknown for a while, even with the expectation that legal recreational usage is set to boost access to Marijuana for those who are of legal purchasing age (Whitehill et al., 2020). Hence, examining the results of the engagement of legal medical and medicinal Marijuana in states like Colorado can help the study forecast the effects of legalizing recreational usage. According to research, the prevalence of marijuana usage remains typically higher in places with medical marijuana laws than in those without (Terry-McElrath & Patrick, 2018). However, despite greater overall usage rates, Stevens (2019) found that states with and without legal medicinal Marijuana had a similar frequency of marijuana use disorders among individuals.

Additionally, research concerning marijuana consumption between states like Colorado with legalized functions and those without showed that little differences exist in the established prevalence of consumption, especially between the periods before and after the passage of medical marijuana legislation (Heidt & Wheeldon, 2022). Furthermore, the analysis also highlights that those states with medical marijuana legislation had higher overall use than those without such laws, both before and after the laws got passed. Despite the higher incidence of dependence among groups like teenagers in Colorado, the analysis predicts that consumption on the individual level is set to advance, even with increased regulations and restrictions.

On the other hand, examining self-reported use intentions is another method the study uses for forecasting the effects of legalizing recreational use in the nation. For instance, before the drug's legalization, high school participants in states like Colorado and Washington got polled through different studies where it got discovered by Matthay et al. (2022) that the majority of marijuana users said they would keep using the same quantity, while roughly 10% of non-users said they would give Marijuana a try. The study also notes that only 18% of users indicated they intended to increase their usage, and the goal remained associated with marijuana use and its increasing consumption. The study also noted that being white, male, or a smoker were additional risk factors for increased usage, although peer group rejection of marijuana use was a protective factor. These risk variables, including being male, white, and having other marijuana-using peers, are identical to the causes identified for contemporary college students starting to use Marijuana (Leyton, 2019). The analysis highlights that marijuana consumption also has adverse effects on the individual, especially those susceptible to increased exposure to the market.

3.6. The Underlying Growing Consumption of Illegal Marijuana and Its Effects on the Individual

Furthermore, although marijuana legalization strives to implement legislation

with an age restriction, the sector does not pay close attention to the growing consumption of marijuana products among adolescents. The survey findings highlight possible risks of legalization on the individual, like increased usage among young people. Since marijuana use among the target group remains prohibited, the study also uses the established findings to offer potentially suitable interventions for mitigating the adverse effects of marijuana consumption and exposure concerning the target populations. Larkin (2018) foresaw several additional probable changes brought on by legalization by highlighting that a legal market may boost competition, leading to a fall in pricing and potential advancement in use because of greater social acceptance and availability. For instance, high alcohol prices remain associated with alcohol usage and its detrimental effects, especially among youth (Hammond et al., 2020). From fall 2014 to spring 2018, Colorado recreational dispensaries' costs decreased, according to surveys (Curry, 2019). These price reductions for Marijuana may boost accessibility, particularly among young people, and marijuana use. Hence, using such information to protect young populations from increased consumption can contribute to implementing similar economic scenarios like raising product costs and increasing reduced accessibility to control consumption.

New marijuana products and delivery methods, including innovative edibles and portable vaporizers, also raised participation and engagement interests in use, especially among younger generations (Chay & Kim, 2022). Following legalization, such factors contribute to increased adverse impacts, especially adolescent marijuana use. Additionally, changes in the population of Colorado are another potential trend that could impact the prevalence of marijuana use. For instance, Colorado's population increased between 2010 and 2014 (Chay & Kim, 2022). Additionally, as of 2021, more people continue to move to Colorado, with the main attraction being the legalization of Marijuana for recreational and medicinal purposes. Research from other sources like newspapers continues to make anecdotal accounts of people relocating to Colorado to give sick family members medical Marijuana (Cerdá et al., 2020). Such factors highlight that the number of marijuana users is set to continue rising if more individuals relocate to Colorado and other states with legal Marijuana. Moreover, the studies also note that while the number of applications from residents in states with legal Marijuana continues to remain fairly stable, the number of applications from non-residents continues to rise at state universities like Colorado State University and the University of Colorado Boulder (Cerdá et al., 2020).

3.7. Individual Elements

The tendency to seek sensation is one element that could raise the incidence of marijuana use. Numerous health-risky activities, such as drug use, have been connected to sensation seeking (Dolan et al., 2021). The likelihood of switching between legal and illicit drug usage, particularly marijuana use, and engaging in other unlawful activities was highest among those who were high on sensation

seeking. Additionally, having peers that are very sensation-seeking is linked to higher marijuana use, probably because such peers are more likely to use marijuana themselves (Dolan et al., 2021). Experience and risk seeking are the two subcomponents of sensation seeking (Haas et al., 2018). The need for new trends and experiences is known as experience seeking. The desire to partake in risky, prohibited or potentially harmful activities is known as risk-seeking. Individuals may rate each of these subsets similarly or differently. Such sensation-seeking factors can limit marijuana use. However, marijuana legalization might have different effects on each of these structures.

People who are high on experience may decide to start using marijuana now that it is a more accessible experience, especially associated with consumers over 21 years of age, the risk associated with engaging in usage has decreased, and accessibility continues to grow. However, accessibility experience remains similar, contributing to a lack of experience of possible changes associated with predicting individual consumer behaviors (Haas et al., 2018). Contrarily, given that using marijuana while underage is still illegal for such people, risk-taking will probably continue to be a substantial predictor of that behavior. However, risk-seeking is probably set to no longer demonstrate a significant predicting factor associated with marijuana use for those of legal age as the behavior continues to prove less risky. Another individual element that affects marijuana consumption represents sexual orientation. According to Haas et al. (2018), sexual orientation can be classified as either purely heterosexual or exclusively gay or measured along a continuum. Measuring sexual orientation on a continuum is frequently recommended since the approach represents a more sensitive intervention for implementing effective categorical methods analyzing influencing factors regarding marijuana consumption among the target group (Haas et al., 2018).

According to research, marijuana consumption is moderated by sexual orientation. Contrary to individuals who identify as heterosexual or gay, parties who represent bisexuals remain more susceptible to consuming marijuana (Heidt & Wheeldon, 2022). Additionally, some research indicates that gay men consume marijuana at higher rates than heterosexual guys (Leyton, 2019). According to other research, bisexual women report increased marijuana consumption compared to non-bisexuals (Leyton, 2019). Despite conflicting results, there has been a persistent quadratic relationship between marijuana use and sexual orientation. Use may be higher among homosexuals than heterosexuals but higher among bisexuals near the middle of the continuum. The concept might be the case because bisexual and homosexual people are more likely to be receptive to new experiences, as shown by their increased rates of sexual exploration and experimentation (Monfort, 2018).

Along with sadness and anxiety linked to an increased risk of marijuana use as substance use, it might also be impacted by difficulties managing feelings of perplexity, non-acceptance, not belonging, homophobia, social discrimination, and the associated emotions (Monfort, 2018). Due to the possibility of experiencing

biphobia from both heterosexual and gay peers, this may be especially pronounced for bisexuals (Scheier & Griffin, 2021). Although these personal and societal factors might exist whether or not marijuana is legalized, shifting social attitudes regarding marijuana use might change how the relationship between sexual orientation and use is influenced. For instance, as marijuana's perceived acceptability has grown, heterosexual people may take it more frequently for coping, experimenting, or other purposes. The approach might level the playing field between marijuana use by homosexuals and heterosexuals.

4. Data and Empirical Strategy

As elaborated by the study in the section before, the federal government does not gather marijuana-related statistics. Finding a sector that best depicts the marijuana market is thus the best strategy for gathering empirical data. After analyzing research by Monfort (2018), the analysis advised that the NAICS code 111,998 (growing on-premises/production) or 453,998 (All Other Miscellaneous Store Retailers, except Tobacco Stores) can remain used to test the hypothesis. The hypothesis argues that the individual state is responsible for establishing regulatory functions concerning engaging legal marijuana functions based on the established specialized lines of policies and functions. It is up to each state to determine how these businesses should be categorized for regulatory purposes. Industry number 453998, which appears to correlate to the marijuana industry, includes dispensaries because this essay seeks to study the effects of employment and enterprises. The report also uses state data from 2001 to 2015 from the Bureau of Labor Statistics (BLS).

A simple difference in differences test remains used to compare and contrast the differences between states that have legalized recreational marijuana and those that have not, looking at changes in employment and the number of businesses to determine the effects of marijuana legalization on the NAICS Industry before and after legalization. The author will perform a difference in differences test for several industries related to the marijuana industry to serve as a benchmark to support or refute the thesis question, as well as a triple differences (DDD) test to investigate the validity of the first test further. The main benefits of using a difference in difference test are its ability to establish a causal connection between the evaluated variables and assess differences between treatment and control groups over time. However, it's crucial to comprehend the underlying premise of the difference differences; if the therapy hadn't been used, the change in the treatment group would have been the same as in the control group. Since this essay aims to assess the effects of marijuana legalization, it is reasonable to justify using a difference in differences tests.

A dummy variable and an interaction variable will also be needed for the regression and included (see Equation 1.1 below). Where Y is the dependent variable measured in either employment or the number of firms in year t, the equation is: $Yt = 0 + 1 (Treat) + 2 (Legal)t + 3 (Treat*Legal) + e$. Legal is a dummy

variable that can be either 0 or 1, and it is used to indicate whether or not recreational marijuana use is legal in the state at the time t. The dummy variable is also used to specify whether the year under consideration is pre- or post-legalization. Equation 1.2 represents the post-legalization regression of a state without recreational marijuana legalization. $Yt = \beta 0 + \beta 1 (0) + \beta 2 (1) + \beta 3 (0) + e$ Equation 1.3 represents the post-legalization regression of a state that has legalized marijuana for recreational use. $Yt = \beta 0 + \beta 1 (1) + \beta 2 (1) + \beta 3 (1*1) + e$ A basic conceptual and graphical illustration of a difference in differences test is shown in the figure below. The conceptual model for the difference in differences test is displayed in the figure. The value to take into account and put to a statistical test is the area in purple (designated as Diff-in-Diffs Estimate; this value is also the value of 3 in the regression above). If the $\beta 3$ coefficient is statistically significant, the legalization of marijuana (the treatment dummy) has a causal link with Y. (economic activity) (Table 1).

The slope of the control and treatment groups should be parallel before marijuana is legalized (or very similar). The slope for the treatment group will diverge (or be greater than) the slope for the control group after marijuana is legalized, as demonstrated by the red vertical line. Ensuring that the states being compared as treatment and control are comparable or fairly similar is also crucial. To put it another way, since there will undoubtedly be disparities in population, economic growth, demographics, and other socio-economic issues, we do not want to compare California with Vermont.

5. Descriptive Findings

Figure 4 depicts the shifts in employment for different states that legalized marijuana between 2001 and 2021. For instance, in 2018, Florida and Nevada represented two of the initial states to legalize marijuana for recreational use. Both indicate a significant rise in employment from either 2018. The concept might be because sales licenses were not authorized until 2021, and legalization took a few months and a year to affect the sector. After the legalization phase, the slope abruptly flips positive, meaning that legalizing marijuana significantly impacted these improvements (Scheier & Griffin, 2021). Some states that legalized marijuana later, like Alaska, New York, Arizona, and Oregon, show a good upward trend in employment. However, there hasn't been much growth in the first two legalizers. As was already said, the legalization of marijuana does not immediately affect industry growth; it takes many months to a year. Oregon, in particular, does not exhibit the same level of growth as the other three states. Scaling difficulties make the rise appear tiny for states like Alaska, Arizona, and New York, yet employment in the sectors continues to climb as of 2021. The changes in the number of firms and the figure indicate similar trends for all states. We have analyzed the employment figures of all the states that have legalized marijuana. There is undoubtedly a pattern: each of the four states that legalized marijuana witnessed increased economic activity.
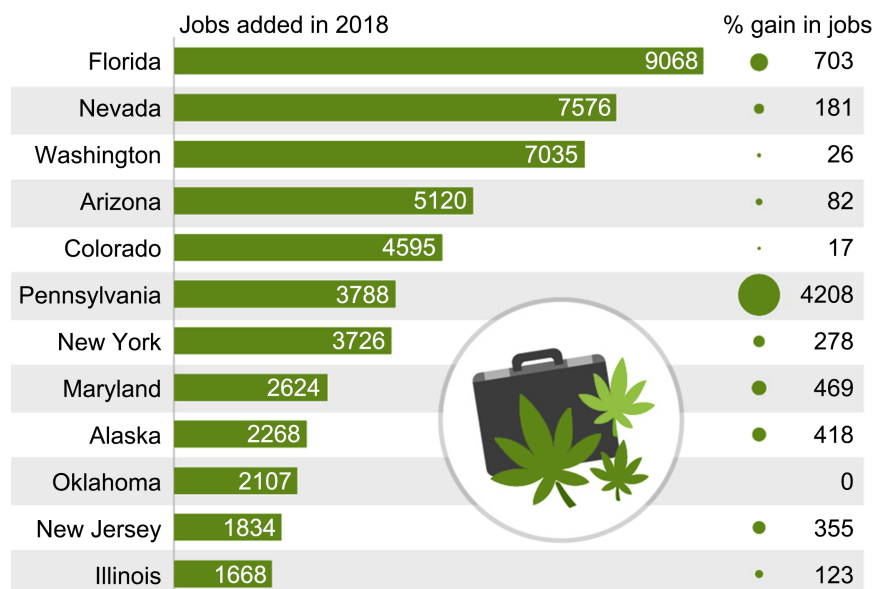
Table 1. Conceptual model for differences in difference.

OUTCOME	Before	After	Difference
No Treatment	*A*	*B*	B-A
Treatment	*C*	*D*	D-C
			(D-C) – (B-A) =
Difference	C-A	D-B	(D-B)-(C-A) =
			Diff-in-Diffs Estimate

As of **Figure 5**, in 2019, the cannabis industry added 32,700 new jobs in the US, totaling 243,700 by 2020, and added 77,300 new jobs by 2021. By 2022, new jobs could be predicted to increase by 107,059 to 428,059 total employment in the year 2022. That's a 32% year-over-year job growth. However, there will be a pandemic around the world. Unemployment soars and economic recession, the legal cannabis industry is adding more and more jobs. But the analysis also needs to check to determine if the economic activity trend was the same across all control states. States with the closest geographic position to the legalizers got engaged to take other economic reasons and variables into account. As of 2021, analysis shows that increased engagement of marijuana laws in states like Wyoming and Kansas continue to advance, while other states, like New Mexico and Nevada, have only approved medical marijuana (Monfort, 2018). Between

The States Getting High On Marijuana Jobs

Number of new jobs added in the U.S. cannabis industry by state in 2018

	Jobs added in 2018	% gain in jobs
Florida	9068	703
Nevada	7576	181
Washington	7035	26
Arizona	5120	82
Colorado	4595	17
Pennsylvania	3788	4208
New York	3726	278
Maryland	2624	469
Alaska	2268	418
Oklahoma	2107	0
New Jersey	1834	355
Illinois	1668	123

@StatistaCharts   Source: Leafly

statista

Figure 4. Employment Graph showing states with legal marijuana consumption in the U.S.
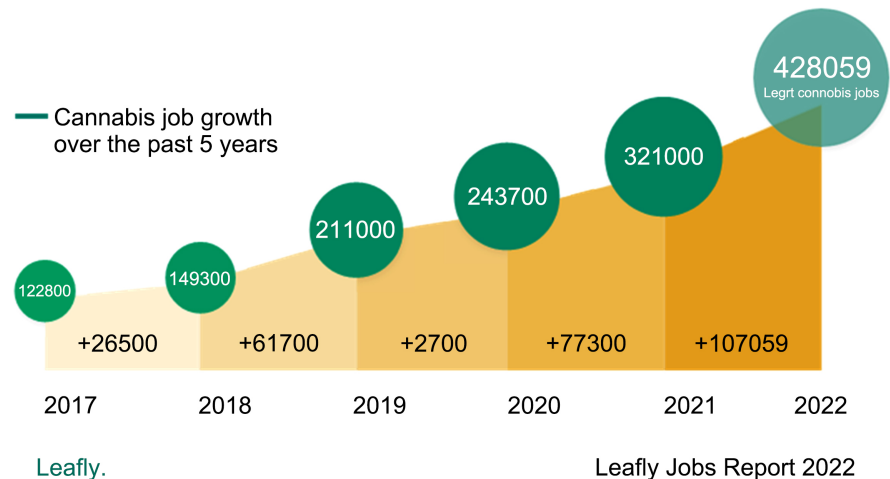
Figure 5. Cannabis legalization and its impacts on employment rates in the U.S.

2012 and 2021, Nevada's employment shows a downward trend, while Wyoming and Kansas have shown a slight uptick since 2019, proving similar to Alaska and Oregon. Although employment in New Mexico has offered an intriguing trajectory since 2018, it is still only 60% of what it was in 2012, suggesting that employers may be attempting to reach market equilibrium (Monfort, 2018).

The trends in other American states are depicted in **Figure 6**. California, Texas, New York, and Florida are the four states with the largest populations, as shown in **Figure 6**. However, even though none of these states have legalized marijuana for recreational use, we can still see an upward tendency in all of them. **Figure 7** and **Figure 8** compare the trends and forecasts of the legal marijuana market in the United States in 2019 and 2020, respectively.

However, according to Terry-McElrath & Patrick (2018), between 2012 and 2014, California's job situation took a downward turn. Since 2018, Florida and New York have seen relatively modest increases in employment. Texas has had a significant increase in employment, which could be attributed to other outside economic causes. Texas's economy has been expanding significantly, and it is conceivable that markets covered by the other miscellaneous retail business are doing likewise. However, as seen in **Figure 4**, we do not see a substantial increase in employment like in Colorado and Washington.

Contrary to earlier data, we may see a downward trend in employment following the legalization period for all three states—Georgia, New Jersey, and Ohio—that have a significantly larger market than the four legalizers (and a relatively more minor market compared to the big 4). The two early legalizers share a similar tendency, a downward slope in employment when we compare the trends in **Figure 6** to those of the two early legalizers. The slope of employment changes to positive for the early legalizers, whereas it remains relatively flat or negative for the three mid-size states.

The research can help to rule out the likelihood that employment in the dispensary sector was growing across the board in all fifty states, thanks to these va-

riances. Additionally, it can imply that larger states' policies may negatively influence smaller states. It is supported by these variations among states, particularly in the control group, that marijuana legalization may affect employment, as seen in the treatment states (Terry-McElrath & Patrick, 2018). Additionally, as anticipated, comparable trends are visible for all Mid-Large Size States' states. Georgia, Jersey, New The number of enterprises in Ohio has changed by 29 as well.
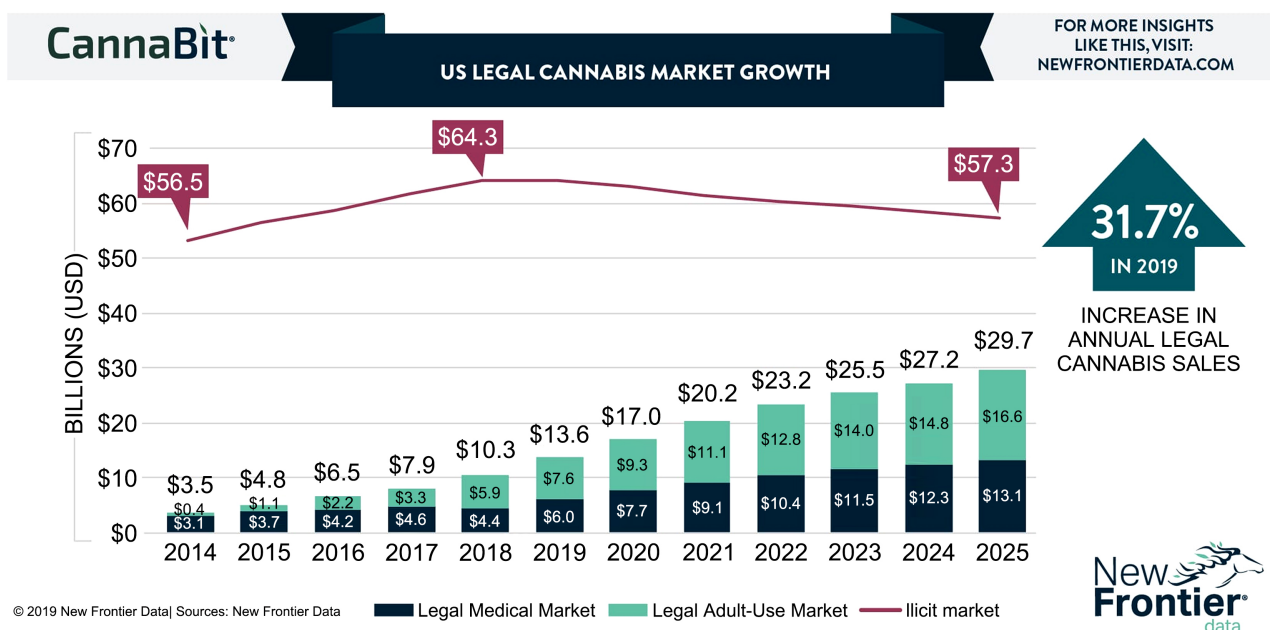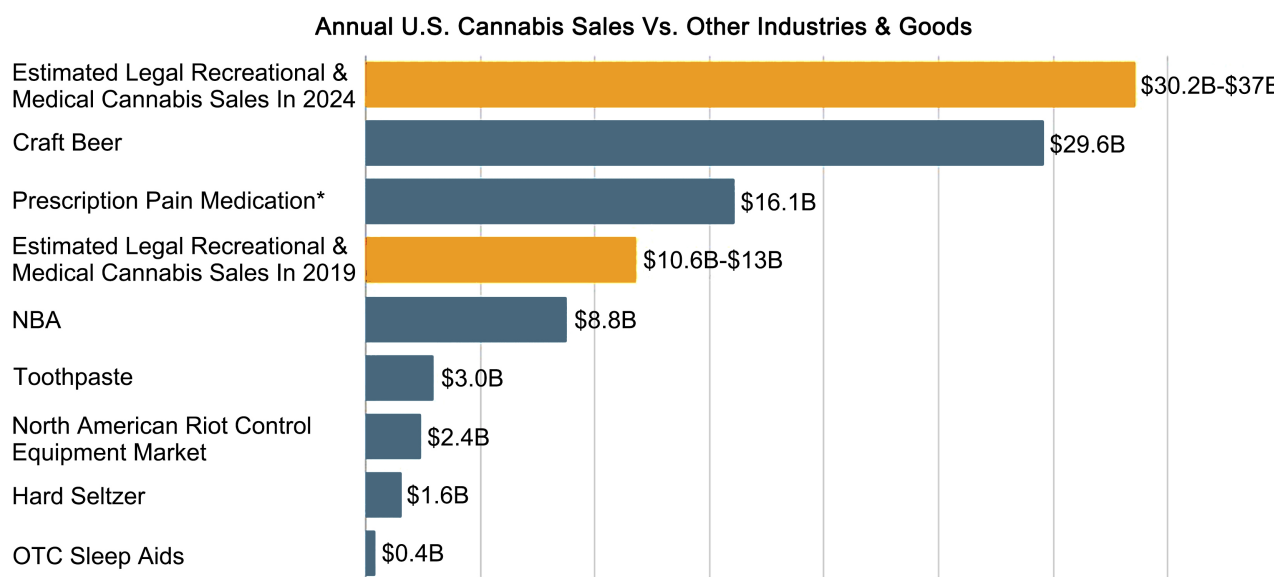

Figure 6. Employment in large states that include California, Florida, New York, and Texas.
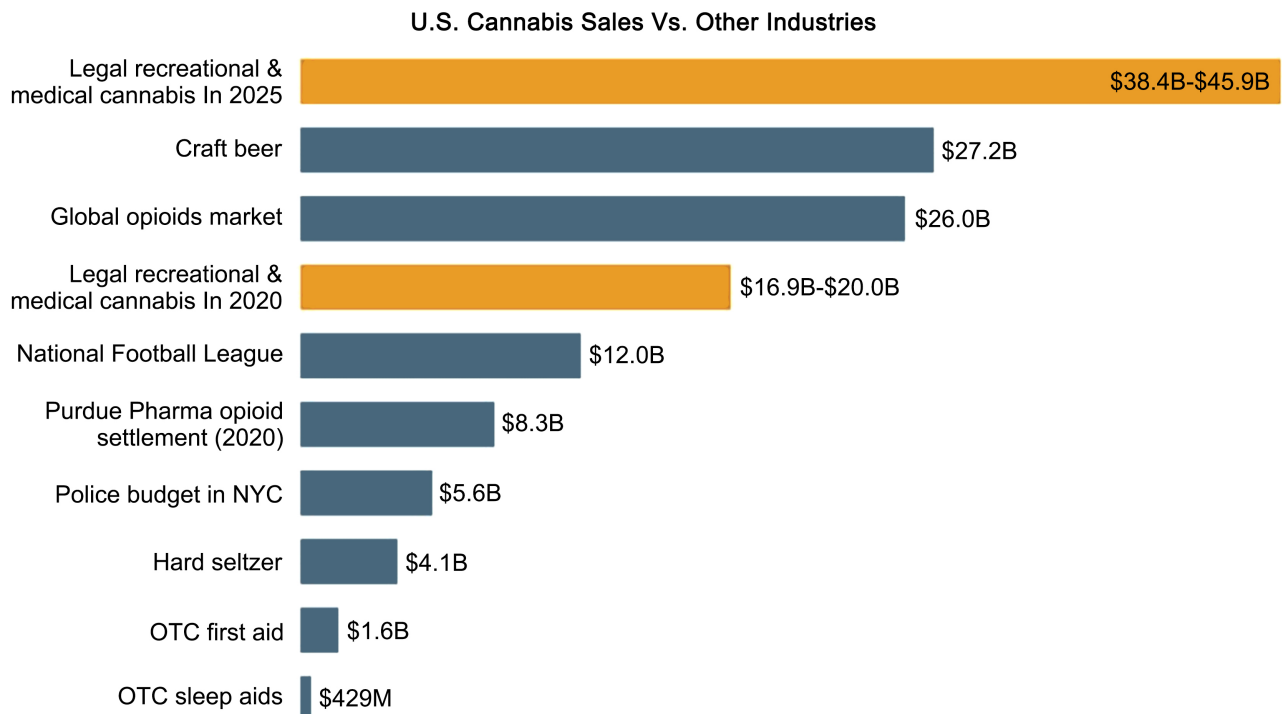

Note: Unless otherwise indicated, all data reported is for 2019.
*Gross spending on drugs in 2018 at invoice prices (the amount wholesalers bill their customers).
Source: Marijuana Business Factbook, The Brewers Association, QuintilesIMS Institute, Statista, Consumer Healthcare Products Association, Inkwood Research Copyright 2020 Marijuana Business Daily, a division of Anne Holland Ventures Inc. Alll rights reserved.

Figure 7. US marijuana legal cannabis market trends and forecasts 2019.

U.S. Cannabis Sales Vs. Other Industries

Industry	Value
Legal recreational & medical cannabis In 2025	$38.4B-$45.9B
Craft beer	$27.2B
Global opioids market	$26.0B
Legal recreational & medical cannabis In 2020	$16.9B-$20.0B
National Football League	$12.0B
Purdue Pharma opioid settlement (2020)	$8.3B
Police budget in NYC	$5.6B
Hard seltzer	$4.1B
OTC first aid	$1.6B
OTC sleep aids	$429M

Note: AIll data reported for 2020.

Source: NielsenIQ, Brewers Association, Consumer Healthcare Products Association, Grand View Research, Statista, Sports Business Journal, NPR
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Figure 8. US marijuana legal cannabis market trends and forecasts 2020.

To sum up, it's critical to remember that not all of the control group's states had improvements in employment. During the same period, some people had unpleasant experiences, others had positive experiences, and some had no change. By holding all other variables constant, marijuana legalization may be the only factor that positively impacted the other miscellaneous retail (dispensary) industry, even though other economic forces outside the model may influence these differences. These differences also help strengthen the claim made in the thesis, establishments in the Middle-Sized States by Year Georgia Jersey, New Ohio.

6. Regression Results

The basic presumption engages different tests that, absent the treatment strategy, the two groups are susceptible to experience similar changes over time. However, one may argue that the demographic makeup of each U.S. state differs from region to region and is not uniform throughout all of them. As a result, we must establish a new fundamental presumption that the parallel trend assumption is true. In the linear regression associated with the treatment and control states across time, the parallel hypothesis specifies that lamda-lamda1 (slope) is the same. If the parallel assumption is true, the regression can determine the causal relationship associated with marijuana legalization and its effects on economic activity. The dependent variable represented through the regression remains

lagged by one year based on the nature of the legalization of marijuana, which may take several months to a year following the policy implementation to see an influence.

After the legalization of marijuana in Colorado in 2012 and the initiation of actual sales in 2014, Fixing year and state effects are also crucial at the same time. Fixing these two factors is crucial because all 50 states were impacted by what occurred domestically in the U.S., especially through concepts like the financial crisis. Any state-related variables are fixed throughout time by the state's fixed effect. For instance, California also continues to hold a specific attribute of engaging policies associated with marijuana legalization since the early Nineties (Heidt & Wheeldon, 2022). A set of treatment and control statements, after and before variables (often year variables), and interaction variables like treatment variables multiplied by time remain needed for establishing a difference in differences examination.

By calculating the natural log of a variable, we may track slow changes in that value over time. For instance, employment increasing by 1 unit annually from 100 over ten years to 110 (10% change) is different from employment declining by 1 unit annually for the first nine years from 100 and increasing by 19 units in the last year (10 percent change). A log variable offers a more precise representation of the real changes brought on by the legalization of recreational marijuana over time. Suppose a state has legalized marijuana or not is indicated by the dummy variable "treat", which has a value of either 0 or 1. The time variable, also expressed in units of 0 or 1, is the "Legal" variable. The product of the treatment and time variables is the interaction variable, which is the final component. However, there is a significant problem that must get resolved. Contrary to a typical difference in differences model, in which the time and policy variable is for a single year, the legalization of marijuana took place throughout two periods in the four legalizers.

As a result, we cannot apply equation 1.1. In this situation, it is necessary to format the difference in differences regression to include these differences. Wooldridge advises using a generic framework considered by Hansen et al. (2020) 27 in these uncommon circumstances. Equation 2.1 is the equation at the personal level there. Yet Xt Ag Sgt Wigt Mgt Vgt Uigt, where I denote the individual, g denotes the group, and t denotes the passage of time. The model has a complete 27 Imbens, G., and J. M. Wooldridge. What has changed in economics? Estimating Differences-in-Differences (Lecture Notes 10, Publication). Page 4 of NBER 33 consists of group effects, Ag, group/period covariates, set of time effects, Xt, Individual-specific covariates, unobserved group/time effects, individual-specific errors, and Sgt (the policy variables) are all listed below.

Equation 1.1 captures the time variable (Legal) and the interaction variable (Treat*Legal) from equation 2.1, whereas Sgt does not. By employing the new equation, a restriction that can remain readily removed is imposed, namely that the policy must have the same effect each year. Equation 2.2 is a straightforward

modification of equation. Yet Xt Ag Sgt et, where it is the unobserved error term fully accounted for. The policy variable Zgt's coefficient must be statistically significant and positive for the hypothesis to be true. Following the implementation of the treatment strategy, Sgt in this equation only quantifies the differences between the control and treatment groups. A positive Sgt would therefore imply that following the implementation of the policy, the treatment group saw a faster growth rate for the dependent variable for variable Y (either employment or establishments) than the control states. A negative coefficient would indicate weaker employment or business growth. Additionally, not all coefficients may have the same strength; for example, Xt and Ag might have negative coefficients, whereas Sgt might have positive values. The regression analysis will also get strengthened by doing a triple-differences test.

7. Discussion

In the current study, marijuana use remains analyzed concerning age, sexual orientation, sensation seeking, and marijuana legalization. One of the major studies used to examine how the legalization of marijuana affects users is through the examination and analysis of relationships altered in light of individual characteristics. As predicted, the findings show that a significant rise in marijuana consumption occurred after it became in diverse states. For instance, analysis of the concept through studies like those implemented by Heidt & Wheeldon (2022) shows that marijuana legalization continues to gain increased attention and acceptance among residents, especially considering the logic of the utilitarian approach concerning marijuana legalization. With the ever-increasing data and resources backing up marijuana use for recreation and medical purposes, users continue experimenting with the consumption. As expected, there was a rise in marijuana use among those over 21, but there was also a slight increase among those under 21 (Heidt & Wheeldon, 2022). The concept most likely means that the legalization of recreational use differs from the legalization of medical use in initiation patterns. The regularity of marijuana use is a crucial consideration. Compared to those under 21, individuals 21 and older indicated much higher average usage frequency during the previous month. However, little to no differences remains in the use frequency between the pre-and post-legalization periods during the past month.

Furthermore, independent analyses revealed no difference between pre-and post-legalization in the frequency of use among adults or children in the past month. These results suggest that even though more people have tried marijuana since it got legalized, usage has not increased in frequency. The concept that dependence rates may also remain unchanged is supported by the constant frequency of use after legalization, even though this study did not screen for dependence. 21 Although not as anticipated, marijuana usage was connected with the desire for risk and new experiences. Past 30-day marijuana use decreased as the experience-seeking rose. This result contradicts a prior study that linked ma-

rijuana usage to a need for feeling (Leyton, 2019). Experience seeking, which is the drive for novelty, may not be a good indicator of use after the first 30 days since prolonged use is no longer fresh. Additionally, contrary to expectations, experience seeking did not differ in predicting marijuana use based on age or legal status. Contrary to what was expected, risk-taking did not indicate use before legalization.

As was predicted by studies like those by Fischer et al. (2021), risk-taking was a strong predictor of teenage marijuana use. The best explanation is that marijuana is still illegal, making it dangerous for underage users. The study's main claim was supported by discovering a curvilinear relationship between marijuana use and sexual orientation, which remains congruent with earlier research (Fischer et al., 2021). According to the resulting approach integrated into the study, marijuana use slightly proved more vulnerable among vulnerable groups like homosexual people than strictly heterosexual people. However, bisexual people use it the most frequently. This result confirmed that marijuana use is set to increase and remain the highest in the middle of the sexual orientation identities and lowest at either extreme.

Additionally, it was in line with earlier research that showed bisexual people used drugs the most frequently. Biphobia and associated stress may be reflected in the increased use. Although homosexuals can use marijuana to cope with social rejection, it seems more common for bisexuals because they may experience rejection from heterosexuals and homosexuals. Even if there is a variation in use throughout the spectrum, it is less than previous findings (Dolan et al., 2021). The concept can reflect the more accepting and permissive culture in Colorado. As a result, people with diverse orientations could feel less willing to refrain from using. Bisexual people are also an "out-group" because they are not the most frequent orientation. 22 Those people may be less inclined to give in to any residual societal pressure because they may already feel stigmatized due to this status. The approach could explain the higher use observed in earlier studies since criticism of use is stronger in places where use is prohibited. Contrary to predicted, results show little to no discernible difference between the quadratic relation before and after legalization. The argument strives to demonstrate that the nature of this relationship was unaffected by legalization.

As a result, factors other than legality and associated perception shifts strongly influence marijuana consumption through sexual orientation. For instance, the impact of marijuana regulations on a student's choice to enroll in regions like universities in Colorado remained linked to lifetime and past 30-day use of the drug. For out-of-state students who used it within the last 30 days, a medium effect got discovered, but a minor effect remained found for lifetime use. These results highlight that marijuana legalization continues to influence relocation to regions with already-established legalization policies, like Colorado colleges since such parties are more likely to use marijuana. Although there was a reduced correlation between lifetime usage and present use, some current users

may have abstained from using marijuana in the past because it was prohibited in their native state.

Due to fewer consequences for marijuana use, once out-of-state students arrive and relocate to regions like Colorado, such individuals may start using or increase through consumption, considering the legalization and decriminalization of marijuana consumption. In light of this, the more significant correlation with recent use may indicate interest in marijuana once it is legal. It is impossible to say whether additional users have arrived in Colorado, changing the state's demographics. However, these findings confirm that marijuana regulations impact out-of-state students' decision to move. Since such a phenomenon only occurs in jurisdictions where marijuana use is legal, it stands to reason that users, particularly those who are heavier, would be more inclined to relocate to one of these states. As a result, compared to places where marijuana is not legal, the student body makeup in these states has probably changed in favor of more users. Keeping a few restrictions in mind when evaluating this data is essential (Dolan et al., 2021). First, it was discovered that how marijuana use was reported varied between online surveys and lab settings. Although the reason for this variation is unknown, it might be a sign of different reaction patterns depending on the situation. Even if privacy and anonymity got protected, there might have been some dishonest reporting. The pre-legalization group then extended to 2013, after marijuana got legalized but before the law was enacted. Due to impending developments, users may have already got drawn to Colorado in periods beginning in 2013.

Additionally, the declining perceived risk of usage during this period may have contributed to the rise in initiation. More recent data would be helpful in illuminating usage trends. Similarly, just the first two years of results have been studied. Findings thus might not be representative of long-term trends. There was no control group to compare the impact of marijuana legislation on attending a Colorado school before legalization. Therefore, it is unclear whether Colorado's marijuana culture has ever drawn marijuana users.

Additionally, this study does not use an experimental setup. As a result, the data did not allow for the establishment of a causal relationship between marijuana use and the impact of legislation on attending a Colorado institution. Finally, the sample's sex, race, and ethnicity demographics did not accurately represent the country's population of adolescents and young adults (Dolan et al., 2021). Colorado's population is disproportionately made up of European Americans. Therefore, this may not be the case in more diverse locations.

Consequently, it is essential to exercise caution when extrapolating these results. The higher percentage of women may potentially change the results. This study has several ramifications. First, legalizing marijuana might encourage more people, especially the legal drinking age, to try it. It won't inevitably lead to more frequent use, however. Education concerning the safety and legal consumption of legalized marijuana is essential to reduce negative effects as more

individuals experiment with marijuana. Next, a person's personality traits can predict various marijuana use patterns. Risk seeking predicted marijuana usage among people under 21, but experience seeking anticipated marijuana use in general. Interventions aimed at reducing harm from marijuana use may be advantageous for people who are very risk-seeking and sensation-seeking.

The gateway theory implemented in the analysis argues against marijuana legalization by highlighting that increased drug consumption contributes to increased experimentation with more potent effects. According to Matthay et al. (2022), maintaining a focus on underage consumers at high risk of marijuana dependency can help to highlight the harmful effects of the demography and risks such parties succumb to. The relationship between marijuana use and sexual orientation is quadratic, which sheds light on how different directions utilize the drug. Use varies over the spectrum of sexual orientations, with various requirements and concerns present at various times. Matthay et al. (2022) note that comprehending and analyzing behavior in such situations provides a better foundation for creating and implementing treatments. For instance, people who identify as bisexual may feel driven to use when vulnerable parties like both homosexual and heterosexual peers reject them. The usage of marijuana as a coping method may emerge from this pressure.

Furthermore, the fact that gays are less likely to use than bisexuals emphasizes the value of avoiding homogenizing all non-heterosexual people. Considering such possibilities, interventions and research may be more attuned to sexual orientation-related individual differences. The relationship between lifetime and past-month marijuana uses, and the decision to attend college in Colorado exposes another area of possible risk. Marijuana usage significantly influencing a person's decision to move is probably a sign of higher or problematic use. These users, who are more prone to negative consequences, have better access to resources thanks to increased availability in Colorado. Perceptions of lessened risk, higher availability, and enhanced acceptance may encourage initiation or ongoing usage for those migrating here. Colleges should adopt interventions to educate and reduce hazards for out-of-state students to counteract potential harm. Similar to this, authorities and medical facilities might tell people about marijuana to lessen the dangers for residents and visitors (Matthay et al., 2022). For instance, soon after relocating to Colorado, many new residents stop by the department of motor vehicles. The region would be a good location to provide literature and harm reduction measures to newly arrived residents. Although it is helpful to observe any early changes, the long-term implications have not yet been determined.

Unexpected changes in use may occur as legislation is amended to address unforeseen problems and as cultural familiarization rises. The long-term effects of legalization will be better understood through longitudinal research conducted over the coming years. In addition, this study has discovered several categories that are vulnerable to unfavorable outcomes, but other high-risk popula-

tions still need to be recognized. Interventions focused on abstinence and harm reduction will be crucial given that adolescents are more likely to experience unfavorable effects and that cultural perceptions are changing in favor of less risk and more acceptance. Future studies must create efficient therapies considering marijuana's shifting attitudes and cultural influences. Although marijuana addiction has been around for a while, treating addicts and users may face particular difficulties due to shifting perspectives on the drug and its use (Patrick et al., 2020). The possible effects of legalizing marijuana for adult use for recreational purposes need to remain taken into account as more states start to do so. Considering both the short- and long-term positive and negative effects is essential. Understanding the ramifications of any recreational use regulations passed around the country will be crucial to their safe implementation.

7.1. Patient Education and Deterrence

It's critical to present facts while discussing cannabis because there is a growing misunderstanding that it is risk-free and safe. Patients should be informed by their healthcare professionals, especially those under 21, who are more likely to experience long-term, irreversible cognitive deficits. Whether they admit to using or not, pregnant patients should be advised about the possible effects of cannabis on the fetus. According to Watson et al. (2019), if adults choose to use cannabis, they should be made aware that, to achieve and prevent child consumption and intoxication, cannabis, and its accessories should be kept in a closed and hidden area. Employers can still follow their corporate standards and fire employees who show up to work drunk or test positive for cannabis, even though medical marijuana is legal in many jurisdictions.

7.2. Other Issues

All healthcare professionals need to educate themselves on the impacts of cannabis use. It is spreading like wildfire throughout our culture. Only a little research has been done to support the use of marijuana for particular ailments, and most of it comes from pharmaceutical preparations of separated THC. Given that it is listed on the Food and Drug Administration's list of prohibited substances, researchers have difficulty getting financing for these studies. Carlier et al. (2020) also note that providers must know that allowing patients access to medicinal marijuana does not limit their use to a specific condition. Employees at the dispensary may choose the strain, dosage, formulation, and indications based on their personal preferences. It is also essential to emphasize that solid or continuous cannabis usage increases withdrawal or intoxication risks, necessitating medical treatment and long-term problems that could be permanent.

Despite being less harmful than using an opioid, benzodiazepine, or alcohol, it has the potential to have negative health impacts and significantly impair social and vocational functioning. It is crucial to distinguish between marijuana misuse and legitimate use as evidence-based uses for drugs grow. It is essential to con-

sider the variations in state laws governing cannabis's medical uses (Carlier et al., 2020). Moreover, according to the study, medical marijuana represents a product that cannot remain strictly scientifically regulated and supported through the pharmaceutical industry. Instead, the product represents an approach originating from growing operations that do not have similar oversight and indicated conditions associated with the pharmaceutical industry. Hence, the process of marijuana legalization, according to Carlier et al. (2020), calls for the realization that engaging scientific evidence and rigorous medical interventions in the sector need to engage in tailor-made interventions to mitigate the needs of the market and the industry.

7.3. Mitigating Suitable Health Interventions

A collaborative effort to address the underlying problem is frequently the greatest way to prevent patients from abusing substances. It is best to understand the causes of use without passing judgment. Cannabis use among kids may signify that the target population may need additional interventions for managing stress at home or school. Hence, integrating counseling is essential for offering at-home, outpatient care, or school, focusing on cognitive behavioral therapy and multidimensional family therapy to address behavioral concerns in both situations, and having psychiatry assess you for any mental health issues (Liao et al., 2019). A similar approach may remain integrated into adult psychiatry and counseling. Reduced cannabis use is correlated over time with advancements in anxiety and sadness but not in life quality. Peer Network Counseling-txt (PNC-txt), a four-week automated text-delivered cannabis treatment program, emphasizes tight peer relationships, successfully reducing usage and relationship issues. Also helpful for substance use disorders are intensive outpatient treatments. Neurology or pain management may also get used to treating persistent pain.

Studies on sleep can be helpful for insomnia. Providers should be aware that patients with a history of substance use disorders are more prone to abuse controlled substances and should use any available techniques for monitoring-controlled prescriptions. In general, treating marijuana use disorder requires a multidisciplinary team approach (Liao et al., 2019). To secure the best results, this team will include physicians, mid-level practitioners, social workers, pharmacists, nurses, and diverse mental health specialists who can work together to address the problem, supervise the prescription of medical marijuana, and freely share patient data.

8. Recommendations

Policymakers at all levels of government must decide which organization will be responsible for enforcing marijuana regulation before beginning a program. Washington made use of the existing institutions in charge of regulating alcohol by setting up a division for cannabis. Other states have employed consumer protection organizations, public health, taxes, and revenue departments. Others, like

California, have many agencies sharing authority, which could lead to coordination issues and make it challenging for licensees to comprehend how to conduct themselves in a complying manner. Existing and established state agencies remain typically better equipped to take on new responsibilities quickly than entirely new organizations, which must take care of internal administrative procedures like securing office space, making purchases, hiring people, drafting mission statements, etc. On the other hand, the implementation procedure may be impacted by institutional biases or conflicting missions within existing entities. Choosing the alternative with the most regulatory flexibility is the best practice, even though there is no universal solution.

Additionally, a state's rule-making procedure's design may significantly impact how effective marijuana is regulated. It is ambitious to create a highly regulated business from the beginning, and authorities may need to modify their regulations as issues occur actively. As a result, the manner and frequency of hearings to adopt proposed laws can significantly impact how well a marijuana sector operates. Regulators must be incredibly thoughtful during the first writing processes that engage industry leaders, diverse practitioners, and academics in seeking feedback from peers in other states in cases where making changes associated with marijuana legalization remains impossible and difficult to make immediate and effective policy changes. Wherever possible, regulatory mandates and standards should be flexible to allow speedy adaptation to unknown future conditions.

8.1. Opportunities for Legal Consumption

The majority of current marijuana legalization legislation limits the actual place of legal consumption to a person's home. According to Orenstein & Glantz (2020), even though the purpose and intention of statutory purposes concerning regulatory jurisdictions towards marijuana strive to engage similar results compared to alcohol regulations, the restricted requirement contrasts starkly with laws limiting the consumption of alcohol. In general, people are free to drink alcohol in places meant for socializing, such as bars. For example, visitors to Las Vegas who have legally purchased marijuana are prevented from using it in their hotel rooms if marijuana use is restricted to private residences. Local governments in California and Colorado have made an independent effort to address this issue by granting marijuana social club licenses. For instance, initiatives like Initiative 300 assist with permitting businesses in implementing suitable procedures to apply for cannabis licenses, as approved by Denver municipal voters in November 2016 (Resko et al., 2019). San Francisco and Oakland, two Californian cities, have also produced comparable permits. Similar to this, a legal opinion from Nevada's Legislative Counsel found that marijuana resorts or lounges are not expressly forbidden by Nevada policy and law and can therefore be established by municipal governments.

8.2. Homegrown Marijuana Legalization

Consumers are generally allowed to grow their marijuana at home within specific parameters in jurisdictions where it is legal to do so for medical or recreational purposes. Most regulations permit the home cultivation of up to six plants as long as they are kept and grown in a secure environment. In Michigan, a person can grow up to 12 mature plants indoors. Within their medical programs, Arizona and Rhode Island equal that cap. Home cultivation is also prohibited in Arizona and Nevada if the resident's home is more than 25 miles from the closest licensed dispensary. Lancione et al. (2020) note that states continue to muddy the waters concerning established policies by failing to specify the maximum number of plants that may be kept in a home when more than one adult resides there. To make this obvious, Colorado and Nevada also set a per-household restriction on plants in addition to individual limits. Enforcement personnel might be unable to tell when a household is expanding if there is no per-household limit set.

Following state marijuana regulations, it is reasonable and required to enable home growth. The approach guarantees that medical and recreational patients can receive the marijuana goods they need, even when a lack of money or a long commute to a registered dispensary prevents those people from buying marijuana products at retail (Lancione et al., 2020). Home growing is the sole way to obtain legal marijuana products in some places, including Vermont and the District of Columbia, where commercial sales are not allowed. Lastly, some customers might want to develop goods not sold commercially but that they can make affordably and safely at home.

8.3. Doctor's Requirements and Recommendations

All medical marijuana programs share the fundamental objective of enabling doctors to prescribe marijuana to patients when they believe it may be a suitable treatment for the patient's condition. The approach was a key objective even in the early stages of state cannabis regulation in the 20th century. It is crucial to remember that any legislation intended to legalize medical marijuana should only mention a doctor's recommendation of marijuana as a treatment rather than their prescription of it (Malter, 2020). This discrepancy arises because an effective recommendation is not subject to federal regulation, whereas the federal government has regulatory jurisdiction over medical prescriptions.

However, before a patient can buy marijuana for medical use, most states demand a formal, written referral from a doctor. The prescribing doctor must generally be registered with the state regulatory body in charge of the medical marijuana program and document each patient's referral in a state database. The function enables the patient to apply for medical marijuana cards from the state, which are also recorded in the state database (Dickson et al., 2018). Most state systems permit a designated caregiver to remain registered within state databases while remaining linked to specific patients or a set of patients when the patient

has a physical condition that restricts mobility.

9. Conclusion

In conclusion, the study strives to highlight that marijuana legalization is a trend set to continue advancing among diverse states. The analysis highlights that suitable implementation of effective policies calls for proper regulation and engagement of advanced research and study on the topic. Comparisons of the marijuana regulatory functions to those implemented for alcohol show that marijuana use is set to advance despite the records used on alcohol regulation. Hence, the analysis strives to engage conversation and debate regarding needing advanced research on the topic of marijuana legalization.

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

References

Carlier, J., Huestis, M. A., Zaami, S., Pichini, S., & Busardò, F. P. (2020). Monitoring Perinatal Exposure to Cannabis and Synthetic Cannabinoids. *Therapeutic Drug Monitoring, 42,* 194-204. https://doi.org/10.1097/FTD.0000000000000667

Cerdá, M., Mauro, C., Hamilton, A., Levy, N. S., Santaella-Tenorio, J., Hasin, D., Wall, M. M., Keyes, K. M., & Martins, S. S. (2020). Association between Recreational Marijuana Legalization in the United States and Changes in Marijuana Use and Cannabis Use Disorder from 2008 to 2016. *JAMA Psychiatry, 77,* 165-171. https://doi.org/10.1001/jamapsychiatry.2019.3254

Chay, J., & Kim, S. (2022). Heterogeneous Health Effects of Medical Marijuana Legalization: Evidence from Young Adults in the United States. *Health Economics, 31,* 269-283. https://doi.org/10.1002/hec.4452

Curry, K. (2019). *In Pursuit of Higher Pleasures: The Moral Value of Criminalizing Drug Users and the Utilitarian Case for Decriminalization.* Saint Paul University.

Dickson, B., Mansfield, C., Guiahi, M., Allshouse, A. A., Borgelt, L. M., Sheeder, J., Silver, R. M., & Metz, T. D. (2018). Recommendations from Cannabis Dispensaries about First-Trimester Cannabis Use. *Obstetrics and Gynecology, 131,* 1031-1038. https://doi.org/10.1097/AOG.0000000000002619

Dolan, S., Arterberry, B., & Davis, A. (2021). A Quadripartite Model of Passion for Marijuana Use: Associations with Consumption, Consequences, Craving, and Satisfaction with Life. *Addiction Research & Theory, 29,* 30-35. https://doi.org/10.1080/16066359.2020.1718117

Fischer, B., Daldegan-Bueno, D., & Reuter, P. (2021). Toward a "Post-Legalization" Criminology for Cannabis: A Brief Review and Suggested Agenda for Research Priorities. *Contemporary Drug Problems, 48,* 58-74. https://doi.org/10.1177/0091450920977976

Haas, A. L., Zamboanga, B. L., Bersamin, M., & Hyke, T. (2018). Perceived Access and Parental Monitoring as Moderators of Impulsivity and Marijuana Use among Adolescents. *The Journal of Primary Prevention, 39,* 155-169. https://doi.org/10.1007/s10935-018-0503-1

Hammond, D., Goodman, S., Wadsworth, E., Rynard, V., Boudreau, C., & Hall, W. (2020).

Evaluating the Impacts of Cannabis Legalization: The International Cannabis Policy Study. *International Journal of Drug Policy, 77,* Article ID: 102698. https://doi.org/10.1016/j.drugpo.2020.102698

Hansen, B., Miller, K., Seo, B., & Weber, C. (2020). Taxing the Potency of Sin Goods: Evidence from Recreational Cannabis and Liquor Markets. *National Tax Journal, 73,* 511-544. https://doi.org/10.17310/ntj.2020.2.07

Heidt, J., & Wheeldon, J. (2022). Data, Damn Lies, and Cannabis Policy: Reefer Madness and the Methodological Crimes of the New Prohibitionists. *Critical Criminology, 30,* 403-419. https://doi.org/10.1007/s10612-020-09548-8

Lancione, S., Wade, K., Windle, S. B., Filion, K. B., Thombs, B. D., & Eisenberg, M. J. (2020). Non-Medical Cannabis in North America: An Overview of Regulatory Approaches. *Public Health, 178,* 7-14. https://doi.org/10.1016/j.puhe.2019.08.018

Larkin Jr., P. J. (2018). Introduction to a Debate: Marijuana: Legalize, Decriminalize, or Leave the Status Quo in Place. *The Berkeley Journal of Criminal Law, 23,* 73-83.

Leyton, M. (2019). Cannabis Legalization: Did We Make a Mistake? Update 2019. *Journal of Psychiatry and Neuroscience, 44,* 291-293. https://doi.org/10.1503/jpn.190136

Liao, J. Y., Mooney, L. J., Zhu, Y., Valdez, J., Yoo, C., & Hser, Y. I. (2019). Relationships between Marijuana Use, Severity of Marijuana-Related Problems, and Health-Related Quality of Life. *Psychiatry Research, 279,* 237-243. https://doi.org/10.1016/j.psychres.2019.03.010

Malter, E. (2020). High Times at the Senior Center: The Impact of Growing Marijuana Legalization on Senior Housing Policies. *The Elder Law Journal, 28*, 453-472.

Matthay, E. C., Mousli, L., Ponicki, W. R., Glymour, M. M., Apollonio, D. E., Schmidt, L. A., & Gruenewald, P. (2022). A Spatiotemporal Analysis of the Association of California City and County Cannabis Policies with Cannabis Outlet Densities. *Epidemiology, 33,* 715-725. https://doi.org/10.1097/EDE.0000000000001512

Monfort, S. (2018). *Effect of Recreational Marijuana Sales on Police-Reported Crashes in Colorado, Oregon, and Washington.* Insurance Institute for Highway Safety.

Orenstein, D. G., & Glantz, S. A. (2020). Cannabis Legalization in State Legislatures: Public Health Opportunity and Risk. *Marquette Law Review, 103,* 1313-1400.

Pacula, R. L., Smart, R., Lira, M. C., Pessar, S. C., Blanchette, J. G., & Naimi, T. S. (2022). Relationships of Cannabis Policy Liberalization with Alcohol Use and Co-Use with Cannabis: A Narrative Review. *Alcohol Research: Current Reviews, 42,* Article No. 6. https://doi.org/10.35946/arcr.v42.1.06

Patrick, M. E., Miech, R. A., Kloska, D. D., Wagner, A. C., & Johnston, L. D. (2020). Trends in Marijuana Vaping and Edible Consumption from 2015 to 2018 among Adolescents in the US. *JAMA Pediatrics, 174,* 900-902. https://doi.org/10.1001/jamapediatrics.2020.0175

Resko, S., Ellis, J., Early, T. J., Szechy, K. A., Rodriguez, B., & Agius, E. (2019). Understanding Public Attitudes toward Cannabis Legalization: Qualitative Findings from a Statewide Survey. *Substance Use & Misuse, 54,* 1247-1259. https://doi.org/10.1080/10826084.2018.1543327

Scheier, L. M., & Griffin, K. W. (2021). Youth Marijuana Use: A Review of Causes and Consequences. *Current Opinion in Psychology, 38,* 11-18. https://doi.org/10.1016/j.copsyc.2020.06.007

Steinberg, J., Unger, J. B., Hallett, C., Williams, E., Baezconde-Garbanati, L., & Cousineau, M. R. (2020). A Tobacco Control Framework for Regulating Public Consumption of

Cannabis: Multistate Analysis and Policy Implications. *American Journal of Public Health, 110,* 203-208. https://doi.org/10.2105/AJPH.2019.305423

Stevens, A. (2019). Is Policy 'Liberalization' Associated with Higher Odds of Adolescent Cannabis Use? A Re-Analysis of Data from 38 Countries. *International Journal of Drug Policy, 66,* 94-99. https://doi.org/10.1016/j.drugpo.2019.01.013

Terry-McElrath, Y. M., & Patrick, M. E. (2018). Simultaneous Alcohol and Marijuana Use among Young Adult Drinkers: Age-Specific Changes in Prevalence from 1977 to 2016. *Alcoholism: Clinical and Experimental Research, 42,* 2224-2233. https://doi.org/10.1111/acer.13879

Wang, G. S., Davies, S. D., Halmo, L. S., Sass, A., & Mistry, R. D. (2018). Impact of Marijuana Legalization in Colorado on Adolescent Emergency and Urgent Care Visits. *Journal of Adolescent Health, 63,* 239-241. https://doi.org/10.1016/j.jadohealth.2017.12.010

Watson, T. M., Mann, R. E., Wickens, C. M., & Brands, B. (2019). Deterring Driving under the Influence of Cannabis: Knowledge and Beliefs of Drivers in a Remedial Program. *Canadian Journal of Criminology and Criminal Justice, 61,* 1-20. https://doi.org/10.3138/cjccj.2018-0020

Whitehill, J. M., Trangenstein, P. J., Jenkins, M. C., Jernigan, D. H., & Moreno, M. A. (2020). Exposure to Cannabis Marketing in Social and Traditional Media and Past-Year Use among Adolescents in States with Legal Retail Cannabis. *Journal of Adolescent Health, 66,* 247-254. https://doi.org/10.1016/j.jadohealth.2019.08.024

Yu, B., Chen, X., Chen, X., & Yan, H. (2020). Marijuana Legalization and Historical Trends in Marijuana Use among US Residents Aged 12-25: Results from the 1979-2016 National Survey on Drug Use and Health. *BMC Public Health, 20,* Article No. 156. https://doi.org/10.1186/s12889-020-8253-4