



International Journal of Applied Technology & Leadership
ISSN 2720-5215
Volume 3, Issue 1, January 2024
ijatl@org

Understanding Manager Sentiment During America's Movement Towards Cannabis Legalization

Steven Boyd, CSP, CIT, OHST, SMS

Capitol Technology University (USA)

Drew Hinton, PhD, CSP, CHMM, EMT

Capitol Technology University (USA)

Abstract

This article examines the differences between federal, state, and jurisdictional recreational cannabis laws and how these differences are creating challenges and risks for organizations. Research for this article was conducted by surveying 118 managers and supervisors from varying businesses across the U.S. to gauge their perspective on current federal cannabis law, the increasing passage of state, district, and jurisdictional recreational cannabis laws, and how these laws may influence potential impairment in the workplace. This research revealed that manager and supervisor perception of various cannabis laws positions them to be sympathetic to individuals that use cannabis outside of the workplace and for recreational purposes. The younger the manager or supervisor the more sympathetic they are. This disposition to being sympathetic may pose concern for organizations when expecting managers and supervisors to enforce workplace drug and alcohol policies. While managers and supervisors may be sympathetic to increased recreational cannabis use within the US, this research revealed they are also concerned about the potential for increased impairment in the workplace. In understanding manager and supervisor perceptions of the increasing trend of recreational cannabis legalization, organizations should strongly consider amending their drug and alcohol policies both to comply with new laws protecting employee off-duty cannabis use and to align with manager and supervisor perceptions. This alignment will allow for greater support from managers and supervisors in implementing and enforcing organizational drug and alcohol policies and most importantly ensure employee safety.

Keywords: Cannabis Legalization, Management Cannabis Sentiment, Management Concerns with Cannabis, Workplace Safety and Cannabis, Cannabis Survey

1. Introduction

As various jurisdictions continue to pass laws legalizing recreational cannabis, there is a lack of studies and understanding of how management and supervisor perceptions of this trend will impact organizations, as they amend their drug and alcohol policies to align with the changing laws. If managers and supervisors lack knowledge of the changes in state, district, and jurisdictional cannabis law, and if workplace drug and alcohol policies don't consider managers and supervisor beliefs and perceptions when amending their drug and alcohol policies to comply with these laws, these policies may prove to be ineffective in ensuring compliance and keeping employees safe.

Statement of the Problem

The aim of this study is to gauge management and supervisor sentiment towards the trend of the legalization of recreational cannabis, and how that sentiment aligns with public opinion. This information will ultimately give organizations a better understanding of management and supervisor beliefs so they can be incorporated into the development or amendment of workplace drug and alcohol policies. This study addresses the following:

- Do managers and supervisors feel federal cannabis laws (see Appendix E) are too restrictive and a burden on society?
- Do managers and supervisors agree with the increasing trend of recreational cannabis legalization?

Understanding the answers to these questions will help organizations when they amend their drug and alcohol policies pertaining to cannabis use. Without developing workplace drug and alcohol policies that incorporate manager and supervisor sentiment, organizations risk leadership support in executing those policies to keep organizations compliant and more importantly employees safe.

2. Theory

With states, districts, and jurisdictions passing laws to legalize recreational cannabis, organization drug and alcohol policies will, in most cases, require amendments to ensure they comply with these new cannabis laws. These amendments will need to ensure compliance with the laws, while ensuring they lead to keeping employees safe within the workplace.

This research will help provide guidance to organizational leaders responsible for developing, managing, and maintaining these policies, by providing an understanding of manager and supervisor sentiment pertaining to the trend of increased recreational cannabis legalization that can be used when amending workplace drug and alcohol policies to ensure greater acceptance and effectiveness.

3. Hypotheses

Several hypotheses were explored in this research.

Null Hypothesis: States that have legalized recreational cannabis should expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

Alternative Hypothesis: States that have legalized recreational cannabis should not expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

Null Hypothesis: Managers and supervisors agree with the trend that more and more states are legalizing recreational cannabis.

Alternative Hypothesis: Managers and supervisors do not agree with the trend that more and more states are legalizing recreational cannabis.

Null Hypothesis: Managers and supervisors feel that increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.

Alternative Hypothesis: Managers and supervisors do not feel that increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.

Null Hypothesis: Managers and supervisors agree that cannabis should not be classified as a Schedule I drug.

Alternative Hypothesis: Managers and supervisors agree that cannabis should be classified as a Schedule I drug.

Null Hypothesis: Managers and supervisors feel Federal cannabis laws are too restrictive and should be modified.

Alternative Hypothesis: Managers and supervisors do not feel Federal cannabis laws are too restrictive and should be modified.

Null Hypothesis: Managers and supervisors feel Recreational cannabis should be legalized on a federal level.

Alternative Hypothesis: Managers and supervisors do not feel Recreational cannabis should be legalized on a federal level.

4. Significance of the Study

Various states, districts, and jurisdictions across the U.S. are legalizing recreational cannabis, in direct contrast with federal law. Leaders in organizations are faced with difficult decisions on how to keep their employees safe while ensuring they don't violate employee rights or violate state, district, or jurisdictional law. The results of this study can be beneficial to employers across the U.S., as most organizations need to amend their drug and alcohol policies due to state, district, and jurisdictional cannabis law changes. For example, new employee protections that have been established, which in some cases would prevent employers from testing employees for cannabis use outside of the workplace and require company policy changes to address these new protections.

This study will address the following concerns:

- Do managers and supervisors agree with the increasing trend of recreational cannabis legalization?
- Do managers and supervisors believe non-violent misdemeanor cannabis charges should be expunged from peoples' records?
- Do managers and supervisors feel the increased legalization of recreational cannabis will lead to an increase in cannabis impairment?
- Do managers and supervisors believe cannabis should be classified as a Schedule I drug (the highest regulated schedule of drugs)?
- Do managers and supervisors feel Federal cannabis laws are too restrictive and should be modified?
- Do managers and supervisors feel cannabis should be legalized on a federal level?

This study will help leaders in organizations better understand manager and supervisor sentiment towards the trend of increasing recreational cannabis legalization. Understanding manager and supervisor sentiment towards recreational cannabis law changes will allow leaders in organizations to amend their drug and alcohol policies for maximum manager and supervisor buy-in and support.

Summary

The legalization of recreational cannabis within states, districts, and jurisdictions has exploded across the U.S. in the past decade all while cannabis remains illegal under federal law. The difference in these laws has created legal pitfalls for organization policies and for managers and supervisors who need to administer those policies. The results of this study will help leaders in organizations understand the importance of considering manager and supervisor beliefs and sentiment when amending their drug and alcohol policies. By incorporating manager and supervisor sentiment in the design and or amendment of organizational drug and alcohol policies, organizations will ensure the greatest support from managers and supervisors who are responsible for managing adherence to the policy. Greater adherence to the policy will lead to greater compliance and ultimately improved safety for employees in the workplace.

5. Literature Review

In order to understand how managers and supervisors are tackling issues of cannabis impairment at the workplace, in conjunction with the legalization of recreational cannabis within states, districts, and jurisdictions, it is necessary to explore the literature from several angles. First, this article will discuss how lack of consistent legalization and lack of cannabis impairment standards serve as the source of uncertainty and frustration for managers and supervisors. This article will then examine public sentiment toward cannabis legalization, exploring how this sentiment changed over time and is now evolving at the federal level.

5.1. Lack of Consistency and Lack of Standards Causes Significant Problems

Two major issues are significant challenges for managers and supervisors who are concerned about cannabis impairment in the workplace and changes in federal, state, and jurisdictional recreational cannabis laws. The first major challenge is the complete lack of consistency, from state to state, in cannabis laws, combined with the reality that cannabis is still a federal Schedule I drug and thus illegal. The second major challenge, stemming from the first, is that this means there is a complete lack of a nationally recognized cannabis impairment standard, and very little understanding of cannabis impairment in general. These two issues are extremely relevant to the research at hand.

With several states at various levels of legalization of medicinal and/or recreational cannabis, companies which cross state borders are particularly challenged to adhere to appropriate laws and treat their employees fairly. To illustrate this issue, DISA, a third-party administrator that offers safety and compliance solutions for businesses, publishes a map regularly which lists the status of cannabis legalization across the country, seen below [1]. According to DISA, there are currently only four states within the U.S. that cannabis is currently fully illegal, and they are: Idaho, Wyoming, Kansas, and South Carolina. But other variants include:

- Cannabis is fully legal and decriminalized.
- Medical cannabis is legal and decriminalized.
- Medical cannabis is legal but not decriminalized.
- Cannabis is fully illegal and decriminalized.

- CBD is legal but not decriminalized.
- Cannabis is fully illegal and not decriminalized.

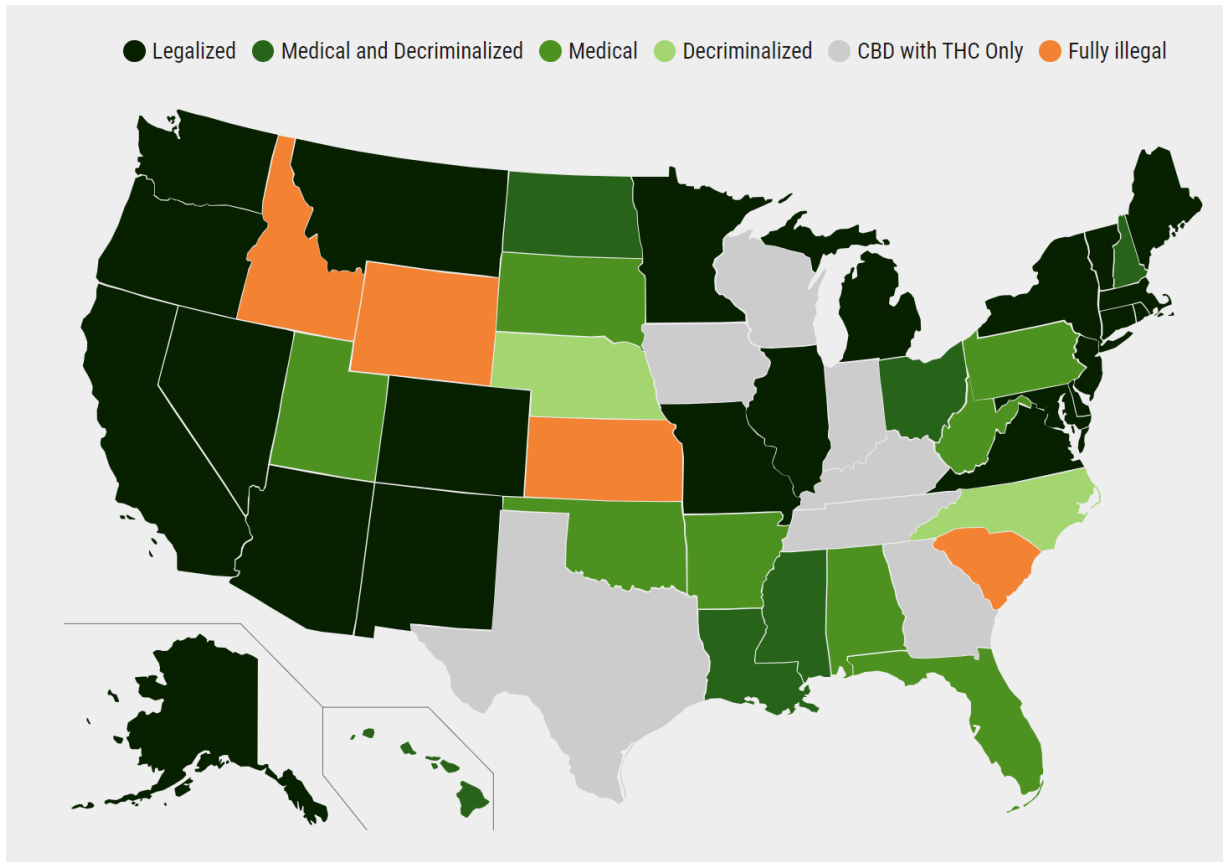


Fig. 1. Source DISA Marijuana Legality by State Map [1]

These varying state laws can create confusion for businesses operating within the U.S., and especially if an organization operates in multiple states within the U.S. Additionally, cannabis laws are changing rapidly, and several states have recreational cannabis on the ballot where voters will be deciding if cannabis should be legal in their state. The constantly shifting nature of cannabis legalization from state to state makes it even more important for large companies to have flexible policies which consider managers' and supervisors' opinions to maximize buy-in.

The other major challenge for managers and supervisors handling cannabis-related issues is that there is a complete lack of a nationally recognized cannabis impairment standard. Little research has been done on the impairing effects of cannabis on the human body. This is mostly due to cannabis being classified as a Schedule I drug by the Federal Government and the need for federal licenses to obtain, store and use cannabis for research purposes. What is currently known is that when a person uses cannabis, the level of cannabis detected in their system is not closely related to their level of impairment. Psychoactive effects of delta-9-tetrahydrocannabinol (Δ 9-THC), which causes impairment, begin immediately after smoking cannabis and typically reach peak levels within 30 minutes, with impairment lasting hours after last ingestion e.g., approximately 4-6 hours [2].

Current cannabis testing methods can detect cannabis within a person's system within minutes after smoking cannabis to several weeks after use. Testing levels peak almost immediately after ingestion and then drop off rapidly. It has been reported that test levels of cannabis can drop as much as 80-90 percent from peak testing levels within 30 minutes from last ingestion. This means that a person could be impaired by cannabis but tested at a low level. Conversely, a person could test positive days to weeks after cannabis ingestion but would not be impaired. Current testing methods do not allow for a reliable correlation between when cannabis was consumed to actual impairment. Current testing methods are a great indicator that a person has consumed cannabis, but a poor indicator of the length of time since cannabis was consumed [2].

Due to limited research and current testing methods, there is currently no nationally recognized cannabis impairment standard to indicate impairment, like that of Blood Alcohol Concentration (BAC). This makes issues of pre-employment testing complex and makes impairment testing impossible. As a result, training for managers and supervisors to see the side effects of impairment is the current best option for managing impairment issues in the workplace while also adhering to state laws regarding cannabis-related workplace discrimination (see Appendix D).

Concerns about these two challenges have been voiced for over a decade. A 2015 report published in the Sage Journal discussed the difficult position employers were in when caught between federal laws prohibiting cannabis use and state laws that have legalized cannabis. This was an early example of scholars noting that there was currently no nationally recognized cannabis impairment standard, meaning that the detection of cannabis metabolites in an employee's system could not indicate acute cannabis impairment and would be inadequate to prove impairment [3].

5.2. Surveying Public Sentiment Towards Cannabis Legalization

Managers and supervisors in companies are, by default, also members of the public, so it is necessary to gain an understanding of the general shifts in American sentiments regarding the legalization of recreational cannabis. Though this has been an issue in the public eye since the 1960s, it is only worth looking at the most recent shifts in sentiment, to understand what managers and supervisors operating in the workforce right now are thinking.

A Gallup poll conducted in May of 2019, consisting of 1,017 adults over the age of 18, asked respondents if and why they supported legalizing cannabis. The poll found that supporters of legalizing cannabis listed the following factors:

- 86% for medical reasons
- 70% to free up law enforcement
- 56% for tax revenue.

Opponents of legalizing cannabis highlighted these factors in the poll:

- 79% were concerned with cannabis use increasing car accidents.

- 69% feel cannabis would be used as a gateway drug to more addictive drugs [4].

This pre-pandemic poll shed light on the associations and concerns on both sides of the issue.

Pre-pandemic sentiment toward cannabis broadly was also positive. According to a Pew Research poll conducted in September of 2019, nearly 91% of respondents felt that cannabis should be legal in some form or another - including medical and recreational. Of the respondents who took part in the survey, 59% felt both medical and recreational cannabis should be legal, while 32% felt only medical cannabis should be legal. Of those respondents 8% feel cannabis should remain illegal in all forms [5].

While polling during the pandemic was minimal, new data became available by 2021. A Gallup poll conducted in October of 2021, consisting of 823 adults over the age of 18, examined how respondents felt about legalizing recreational cannabis. Of those respondents, 68% stated that they believed cannabis should be legal. This is yet another data point indicating that sentiment towards cannabis legalization is evolving and trending towards greater acceptance of the legalization of cannabis within the U.S [6].

In a November 2022 survey consisting of 1,282 likely voters conducted by Data for Progress, 74% of respondents supported expunging cannabis-related non-violent offenses. Of the respondents, 85% of Democrats strongly or somewhat supported expunging cannabis non-violent offenses, while 63% of Republicans polled strongly or somewhat supported expunging non-violent cannabis offenses. This shows that there is strong support, even across party lines, for expunging cannabis-related non-violent offenses [7].

In a massive Civic Science rolling survey conducted between October 2021 and April 2023, consisting of 118,459 responses, respondents were asked if they would support or oppose a law in your state that would legalize, tax, and regulate marijuana like alcohol. On average, over 60% of respondents supported legalizing and regulating marijuana like that of alcohol. With such a large population in this study it is a great representation of the movement in the U.S. to legalize recreational cannabis on a national level [8].

Finally, public sentiment also appears to be turning in states where there is not yet legalized recreational cannabis. In a University of New Hampshire cannabis survey consisting of 1,105 residents conducted in May 2023, 72% of respondents support legalizing cannabis for recreational purposes. Of the 72% who support state legalization, 85% of New Hampshire Democrats support legalizing cannabis and 58% of Republicans support legalizing cannabis. Still, as of October of 2023, recreational cannabis is illegal under New Hampshire State law. Respondent sentiment suggests that New Hampshire may be poised to make recreational cannabis legal in the near future, an issue that may gain national attention as New Hampshire serves as a Republican primary battleground in the 2024 election cycle [9].

5.3. Addressing Changing Views on Pre-Employment Testing

With changes in federal, state, and jurisdictional recreational cannabis laws having an effect on the way citizens can legally interact with cannabis, it would not be surprising to see increases in the use of cannabis in these areas. A Gallup poll conducted in July of 2023 consisting of 1,015 adults over the age of 18 were polled asking if they have ever tried cannabis and if they currently use cannabis. Of those respondents, 50% affirmed that they had tried cannabis, with 17% of respondents answering that they regularly smoke cannabis. Interestingly, the percentage of Americans who smoke cannabis has nearly doubled since 2013 when only 7% of adults answered yes to smoking cannabis [10].

An increase in cannabis use in states and jurisdictions where it has been legalized recreationally has also led to a general change in how companies consider testing for cannabis use before hiring. A 2019 article published by the Society for Human Resource Management (SHRM) discussed how tight labor markets are changing the way employers view and manage cannabis testing in the workplace. Author Tamara Lytle revealed that many employers felt they were losing talented people when they conducted pre-hire cannabis testing and have since dropped pre-hire cannabis testing within their organizations [11].

For example, companies like Caesars Entertainment dropped cannabis pre-hire testing but will continue to test for cannabis under reasonable suspicion circumstances, while Apple dropped cannabis pre-hire testing for all non-safety-sensitive positions. The article mentioned a director for an unnamed national fast-food franchise said they would lose 80% of potential hires if they tested for cannabis [11]. Other large companies to remove cannabis from their testing pool are Amazon, AutoNation, and Bank of America. Groups like the National Basketball Association, Major League Baseball and the National Hockey League have all relaxed their cannabis testing requirements [12].

Employers want to keep employees safe, but they are feeling the pinch of trying to fill positions to meet production goals, Lytle argued [11]. With increased cannabis legalization and increasing employee protections for off-duty cannabis use, employers are feeling squeezed to drop cannabis pre-hire testing or face a shortage of workers when trying to fill open positions.

5.4. Recent Changes in Federal Perspectives on Cannabis

While there have been significant changes in state-level federal, state, and jurisdictional recreational cannabis laws, as well as public sentiment toward these laws, recreational cannabis is still illegal at the federal level. However, in the past two years, there have been signals that the Federal Government is considering a move toward federal legalization, which would be relevant for multi-state companies and businesses.

On October 6, 2022, President Biden issued an official statement pertaining to cannabis. President Biden announced he was taking steps to correct a failed approach towards cannabis incarcerations and the classification of cannabis as a controlled substance. In the statement, President Biden announced the following steps:

- He instructed the Attorney General to develop a process to pardon prior Federal cannabis simple possession cases.
- He requested that the governors of states take the same approach and pardon state simple possession cases for cannabis.
- He asked the Secretary of Health and Human Services and the Attorney General to review the classification of cannabis as a Schedule I drug.

This statement marked a significant milestone as the Federal Government initiated dialogue and opened the door to potentially relaxing cannabis restrictions on a federal level [13].

In December of 2022, the Medical Marijuana and Cannabidiol Research Expansion Act (H.R. 8454) was enacted to ease restrictions on practitioners who conduct cannabis research and ease restrictions on manufacturers who supply practitioners with cannabis. The Act requires the Attorney General to approve or deny applications for registration according to specific criteria and timelines. The Act also requires practitioners who receive registrations to ensure the security of research cannabis by storing in a substantially constructed and locked cabinet. In addition, the practitioner must safeguard research cannabis against diversion [14].

On August 29, 2023, the Department of Health and Human Services recommended to the Drug Enforcement Agency (DEA) that cannabis be rescheduled from a Schedule I drug under the Controlled Substance Act (CSA) to a Schedule III drug under the CSA. Schedule I drugs are listed as having a high potential for abuse and no currently accepted medical use whereas Schedule III drugs have a high potential for abuse and a currently accepted medical use. If cannabis is rescheduled it would mark a major shift in the Federal Government's policy on cannabis [15].

But beyond changes in public sentiment, and thus manager and supervisor sentiment, toward recreational cannabis use, this research study also examined concerns over cannabis impairment, particularly in the workplace. Cannabis impairment in the workplace can be detrimental to employee health and safety. A brief review of that literature was also relevant for this study's research concerns.

Summary of Literature Review

Over the past decade numerous cannabis surveys have been conducted within the U.S. resulting in clear evidence that public support for recreational cannabis legalization continues to rise. Support crosses age, gender, political and racial boundaries as all consistently show increasing support of cannabis legalization. Companies have also been changing pre-hiring testing, but many are simultaneously failing to enact cannabis policies for employees. With signs that there will soon be a softening of policy at the federal level, it is more important than ever for companies to take stock of the sentiments of their managers and supervisors in regard to recreational cannabis legalization and use.

6. Methodology

This research required a minimum of 100 participants. In order to participate in the research, participants were required to be at least 18 years of age with no maximum age limit. Participants could be male or female, working full or part time, and having the responsibility of managing or supervising at least one direct report, all living and working within the United States. Participants could not be prisoners, vulnerable groups, nor minors. Nor could respondents be affiliated with drug or alcohol manufacturers, distributors, representatives or in any way related to family members who work in these industries. Participation in the survey was strictly voluntary and participants were not compensated in any way. Participants for the survey were recruited through email and social media e.g., LinkedIn, Facebook, and Twitter.

The research was conducted using a single electronic survey conducted through SurveyMonkey. The research results included a total of 118 participants, all of which acknowledged that they met the research population's background requirements. The survey consisted of 40 questions, with 10 questions pertaining to this study, of which three questions were asked again, after brief training and information were provided to participants. The 40-question survey, and brief training, took approximately 22 minutes to complete.

This research was designed to evaluate manager and supervisor sentiment towards state, district, and jurisdictional changes in cannabis law and how those laws may affect employee safety in the workplace. Questions evaluated managers and supervisors' sentiment towards changing cannabis laws, in which managers and supervisors were asked some of the same questions after brief training, and sharing of resource material to determine if their sentiment would change.

The research survey started on March 20, 2023, and concluded on April 15, 2023. Participants were asked to complete the research survey to help gain an understanding of managers and supervisors' sentiment towards changing cannabis laws. Organizations can use this information to amend their drug and alcohol policies to not only be compliant, but to ensure buy-in from managers and supervisors who are tasked with managing organizational policy.

6.1. Data Collection Questions

Participants for this article's research study completed 10 survey questions (some of which were repeated after training). Four questions were geared towards developing the survey profile and six questions pertained to manager and supervisor perceptions of changes and trends in state, district, and jurisdictional cannabis law, and their agreement or disagreement with these changes and trends. The survey questions, which can be found in (Appendix A), were administered as follows: questions one through four required participants to choose from a set of questions to gather facts about the participants e.g., age, gender, location, and type of business in which they work.

Questions five through ten were administered using a 7-point Likert scale. The 7-point Likert scale was chosen to allow participants the ability to have a neutral position, and account for a more accurate picture of manager and/or supervisor perceptions as compared to participants using a less specific 5-point Likert scale. Managers and supervisors answered survey questions,

in which they then took part in brief cannabis training and sharing of resource material, and were then asked to answer question number five, nine, and ten again to see if the brief training and sharing of resource material influenced their responses.

6.2. Data Analysis

Significant effort was made to ensure the reliability of the data collected. Prior to taking the survey, respondents were required to acknowledge that they were at least 18 years of age and currently managing or supervising at least one employee. As respondents answered the survey questions, they were required to answer each question, or the survey would not allow them to continue. By ensuring each question was answered, this added to the validity of the data when results were compared against each other.

Data gathered from respondents in this qualitative research was analyzed using the following methods: ANOVA test to test for the mean of more than two variables and t-test to test for the mean of two variables. These two test methods were used to analyze the variance and statistical significance between manager and supervisor responses to survey questions before and after they received brief training and access to information to educate respondents on cannabis law. The p-value of these two tests allowed us to understand the significance and effect on respondent outcomes before and after training. Manager and supervisor responses to survey questions post training were used to accept or reject the null hypothesis. Responses with a value of 50 percent or greater resulted in acceptance of the null hypothesis and responses with a value of 49 percent or less resulted in acceptance of the alternative hypothesis. Understanding the differences in the data illuminated patterns and themes of respondent sentiment. That sentiment was then compared against reviewed literature, allowing for inference when developing a conclusion to this article.

7. Results

For this study, 118 managers and/or supervisors were surveyed with a minimum age requirement of 18 years of age and supervising at least one employee. Initial questions related to demographic information to create the Respondents' Profile:

Questions 1-4

1. Please indicate which grouping best represents the year you were born.

1997 - 2012

1981 - 1996

1965 - 1980

1955 - 1964

1946 - 1954

2. Please indicate your gender.

Male

Female

3. Please indicate in which state you reside.

4. Please indicate which work environment most closely represents the majority of the team members in which you supervise.

Warehousing and Distribution Environment
 Manufacturing Environment
 Construction Environment
 Office Setting Environment
 Restaurant or Retail Environment

Respondents' Profile

A total of 118 respondents participated in the survey. The vast majority were males (n = 94; 80%) and nearly half (n = 56; 47% were middle-aged adults (43 – 58 years of age). The respondents came from 28 different states, with the majority residing in Wisconsin (n = 34; 29%). Respondents worked mainly in the warehousing and distribution sector (n = 66; 56%), followed by office setting (n = 19; 16%) and manufacturing (n = 12; 10%).

TABLE I: Profile of Respondents

Variable	Frequency	Percent (%)
Age group		
18-26 years old	2	2
27-42 years old	38	32
43-58 years old	56	47
59-68 years old	22	19
Gender		
Male	94	80
Female	24	20
Work environment		
Warehousing and distribution	66	56
Office setting	19	16
Manufacturing	12	10
Construction	5	4
Others	16	14
State		
Wisconsin	34	29
Texas	10	8
California	7	6
New Hampshire	7	6
Iowa	6	5
Illinois	6	5
Massachusetts	5	4
Florida	4	3
Pennsylvania	4	3
Ohio	3	3
Michigan	3	3
Colorado	3	3
Minnesota	3	3
Nevada	3	3
New Jersey	2	2
Georgia	2	2
Maine	2	2
Missouri	2	2
Kentucky	2	2
New York	2	2
Arizona	1	1
Indiana	1	1
Tennessee	1	1

Kansas	1	1
Vermont	1	1
Maryland	1	1
Connecticut	1	1
Rhode Island	1	1

Question No. 5

Please indicate your level of agreement with the following statement: All states that have legalized recreational cannabis should expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

The following figure shows that 57% managers and supervisors somewhat agree, agree, or strongly agree that misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in all states that have legalized recreational cannabis should be expunged. The proportion who agreed has decreased to 53% after managers and supervisors were given brief training and educational information. This decline was also shown from the calculated mean scores.

The agreement level was slightly higher in pre-training ($M = 4.33, SD = 1.948$) than post-training ($M = 4.28, SD = 1.952$). However, the difference between the two mean scores was not statistically significant since the p-value is not less than 0.05 ($t(117) = 0.446, p = 0.657$) (see Table II). Thus, the brief training and educational information did not change manager and supervisor level of agreement on expungement of any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in all states that have legalized recreational cannabis.

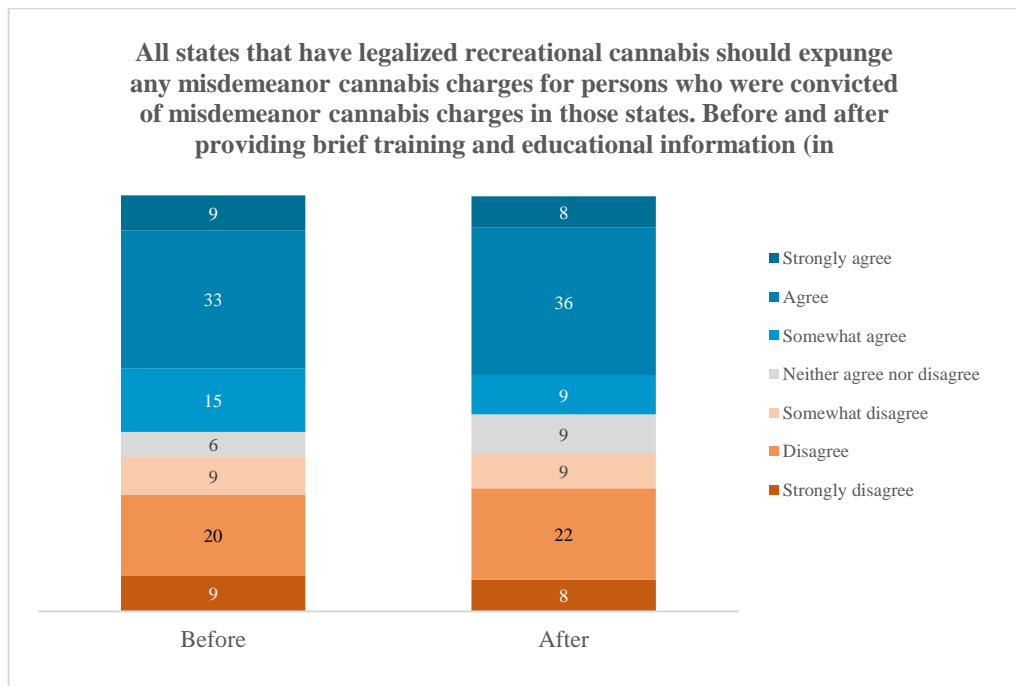


Fig. 2. Agreement Level on Expungement Before and After Training

TABLE II: Difference in Mean Scores and Paired T-Test Before and After Training

	T3B	Mean	Std. deviation	Mean difference	Paired t-test		
					t	df	p-value
Before	57%	4.33	1.948	0.051	0.446	117	0.657
After	53%	4.28	1.952				

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree.

Further analysis was carried out to see the level of agreement on expungement of any misdemeanor cannabis charges across the respondents' profile. Young managers and supervisors (≤ 42 years old) appeared to have the highest level of agreement on this statement ($M = 5.20, SD = 1.52$) than middle-aged adults ($M = 3.82, SD = 2.03$) and older adults ($M = 4.05, SD = 1.96$). ANOVA test indicates that the differences between the three age groups were statistically significant ($F = 6.731, p = 0.002$). After managers and supervisors were given a brief training, these differences remained statistically significant between the three groups ($F = 5.041, p = 0.008$). In terms of gender, both males and females responded similarly in both pre and post training as the results from t-test show no significant difference.

TABLE III: Summary Statistics and Significant Differences Before and After Training

	Before						After				
	n	T3B	Mean	SD	ANOVA/t-test		T3B	Mean	SD	ANOVA/t-test	
					statistic	P-value				statistic	P-value
Age group											
≤ 42 years old	4	75%	5.20	1.52	6.731	0.002	68%	5.05	1.66	5.041	0.008
43-58 years old	5	45%	3.82	2.03			48%	3.88	2.06		
59-68 years old	6	55%	4.05	1.96			36%	3.91	1.80		
Gender											
Male	9	57%	4.33	2.01	0.008	0.994	53%	4.30	2.01	-0.200	0.842
Female	4	54%	4.33	1.71			50%	4.21	1.74		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

Question No. 6

Please indicate your level of agreement with this trend: Many U.S. States have legalized recreational cannabis and it is anticipated that this trend will continue.

The following figure shows that 85% of managers and supervisors somewhat agree, agree, or strongly agree that the current trend of recreational cannabis legalization will continue.

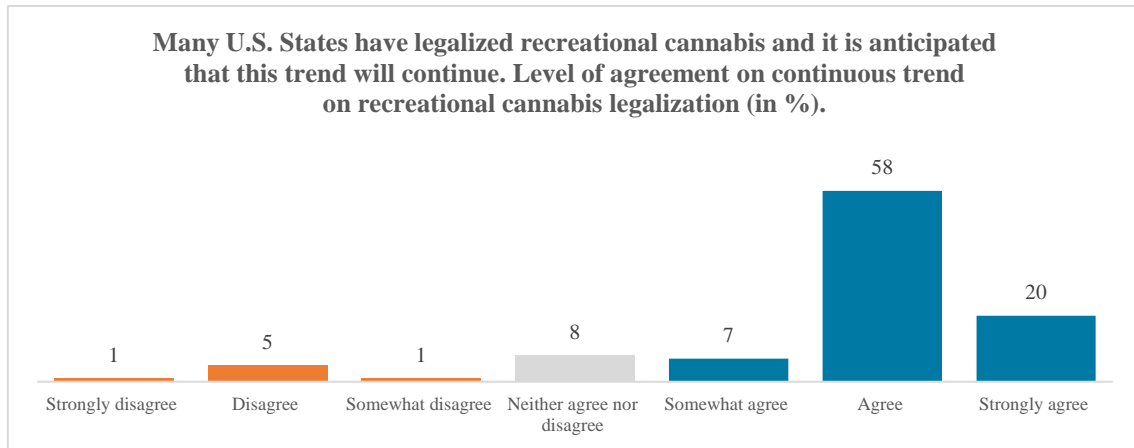


Fig. 3. Agreement on Cannabis Legalization Trend

Further analysis was conducted to see the level of agreement on anticipation with continuous trend on recreational cannabis legalization across the respondents' profile. The agreement levels across age group were significantly different ($F = 7.201, p = 0.001$). As age of groups increased, the agreement level decreased. Both males and females rated this statement almost equally high, thus no significant effect of gender on agreement level for this statement ($t = -0.236, p = 0.814$).

TABLE IV: Summary Statistics and Significant Differences Before and After Training

	n	T3B	Mean	SD	ANOVA/t-test	
					statistic	p-value
Age group						
<=42 years old	40	95%	6.20	0.76	7.201	0.001
43-58 years old	56	84%	5.61	1.25		
59-68 years old	22	68%	5.00	1.72		
Gender						
Male	94	85%	5.68	1.33	-0.236	0.814
Female	24	83%	5.75	1.07		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

Question No. 7

Please indicate your level of agreement with the following statement: Increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.

The following figure shows 69% of managers and supervisors somewhat agree, agree, or strongly agree that an increase in state, district or jurisdictional cannabis legalization will lead to an increase in employees being impaired by cannabis while on duty.

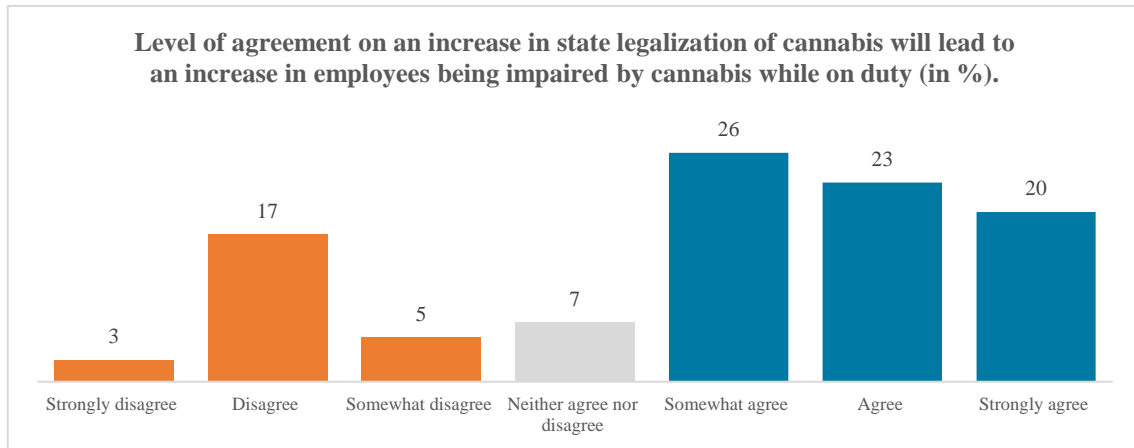


Fig. 4. Agreement Level on Increasing Impairment While on Duty

Further analysis was conducted to see if the level of agreement that ‘increasing state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty’ across respondents’ profile. Middle-aged adults appeared to agree more than younger and older adults. But statistically speaking, these differences across age group were not found to be significantly different ($F = 2.975, p = 0.055$). However, significant difference was found among gender, where males responded significantly higher than females ($t = 2.088, p = 0.039$).

TABLE V: Summary Statistics and Significant Differences Before and After Training

	n	T3B	Mean	SD	ANOVA/t-test	
					statistic	p-value
Age group						
<=42 years old	40	55%	4.35	1.90	2.975	0.055
43-58 years old	56	80%	5.23	1.63		
59-68 years old	22	64%	4.73	1.83		
Gender						
Male	94	71%	5.01	1.75	2.088	0.039
Female	24	58%	4.17	1.83		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

Question No. 8

Please indicate your level of agreement with the following statement: Cannabis is currently classified as a Schedule I drug under federal law. A few examples of Schedule I drugs are: ecstasy, heroin, LSD, cannabis, and peyote (mescaline), and are considered to have the highest potential for dependance and abuse. Which category best describes your agreement that cannabis should be classified as a Schedule I drug?

The following figure shows 26% of managers and supervisors somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug under federal law.

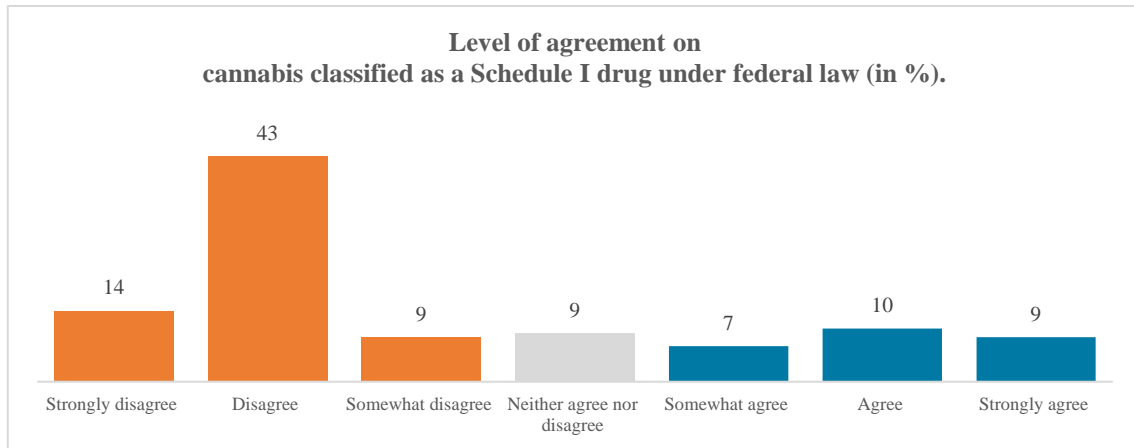


Fig. 5. Agreement Level for Cannabis as a Schedule I Drug

Further analysis was conducted to see the level of agreement on cannabis being classified as a Schedule I drug under federal law across the respondents' profile. The agreement levels on this statement are consistently grouped by age and gender. The agreement level appeared to increase as age increased. Male managers and supervisors tend to give higher agreement.

TABLE VI: Summary Statistics and Significant Differences Before and After Training

	n	T3B	Mean	SD	ANOVA/t-test	
					statistic	p-value
Age group						
<=42 years old	40	15%	2.68	1.58	2.087	0.129
43-58 years old	56	30%	3.43	2.03		
59-68 years old	22	32%	3.41	1.99		
Gender						
Male	94	29%	3.29	1.98	1.336	0.184
Female	24	13%	2.71	1.49		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

Question No. 9

Please indicate your level of agreement with the following statement: Federal cannabis laws are too restrictive and should be modified.

The following figure shows that 59% managers and supervisors somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified. The proportion who agreed only decreased by one percent after managers and supervisors were given brief training and educational information. A slight decline was also shown from the calculated mean scores. The mean score was 4.63 (SD = 1.880) in pre-training and 4.56 (SD = 1.884) in post-training. The difference between the two mean scores was not statistically significant since the p-value is not less than 0.05 ($t(117) = 0.783, p = 0.435$) (see Table VII). Thus, the brief training and educational information did not change managers and supervisor level of agreement on modification of federal cannabis laws.

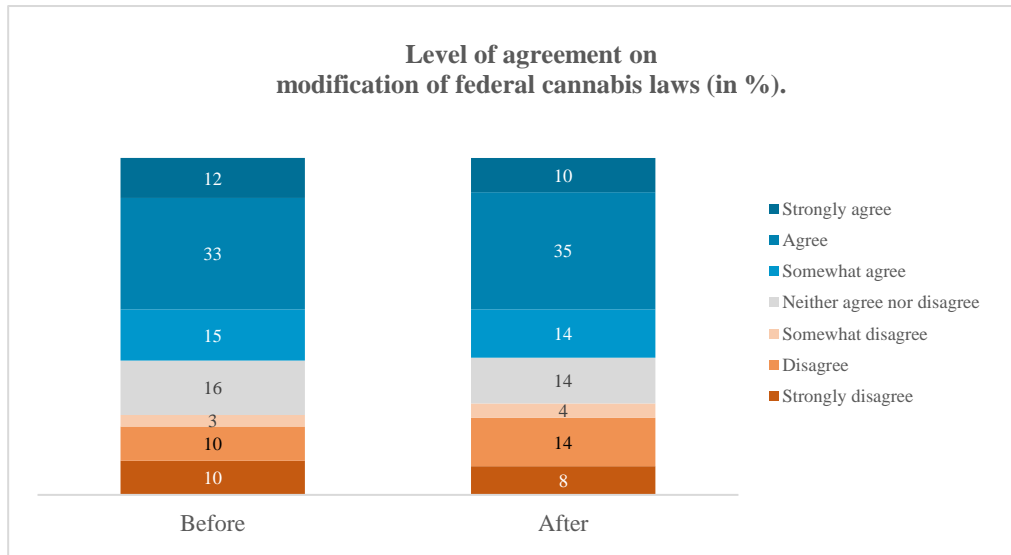


Fig. 6. Agreement Level that Federal Cannabis Laws are Too Restrictive Before and After Training

TABLE VII: Difference in Mean Scores and Paired T-Test Before and After Training

	T3B	Mean	Std. deviation	Mean difference	Paired t-test		
					t	df	p-value
Before	60%	4.63	1.880	0.068	0.783	117	0.435
After	59%	4.56	1.884				

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree.

Further analysis was conducted to see the level of agreement on modification of restrictive federal cannabis laws across the respondents' profile. The agreement level appeared to decrease as age increased in both pre and post training. However, significant differences were only found after managers and supervisors were introduced to the brief training and educational information ($F = 3.382, p = 0.037$). Males ($M = 4.62, SD = 2.02$) generally gave a lower rating than females ($M = 4.67, SD = 1.20$), but no significant difference was found between the two groups ($t = -0.115, p = 0.909$). This trend remained the same in post-training where males had a lower rating than females; however, no significant difference was found ($t = -0.433, p = 0.666$).

TABLE VIII: Summary Statistics and Significant Differences Before and After Training

	Before					After					
	n	T3B	Mean	SD	ANOVA/t-test statistic	p-value	T3B	Mean	SD	ANOVA/t-test statistic	p-value
Age group											
<=42 years old	4	73%	5.20	1.57	2.901	0.059	73%	5.18	1.52	3.382	0.037
43-58 years old	5	54%	4.34	1.98			54%	4.27	2.05		
59-68 years old	6										
	2	55%	4.32	1.99			50%	4.18	1.84		
	2										

Gender

Male	9 4	62%	4.62	2.02	-0.115	0.909	60%	4.52	1.98	-0.433	0.666
Female	2 4	54%	4.67	1.20			58%	4.71	1.46		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

Question No. 10

Please indicate your level of agreement with the following statement: Recreational cannabis should be legalized on a federal level.

The following figure shows that 59% of managers and supervisors somewhat agree, agree, or strongly agree that recreational cannabis should be legalized on a federal level. The proportion who agreed has only declined by three percent after managers and supervisors were introduced to the brief training and educational information. A similar decreasing trend was also shown from the calculated mean scores. The mean score was 4.56 (*SD* = 2.019) in pre-training and 4.47 (*SD* = 2.016) in post-training. However, the difference between the two mean scores was not statistically significant since the p-value is not less than 0.05 ($t(117) = 0.821, p = 0.413$) (see Table IX). Therefore, the brief training and educational information did not change manager and supervisor level of agreement on legalization of recreational cannabis on a federal level.

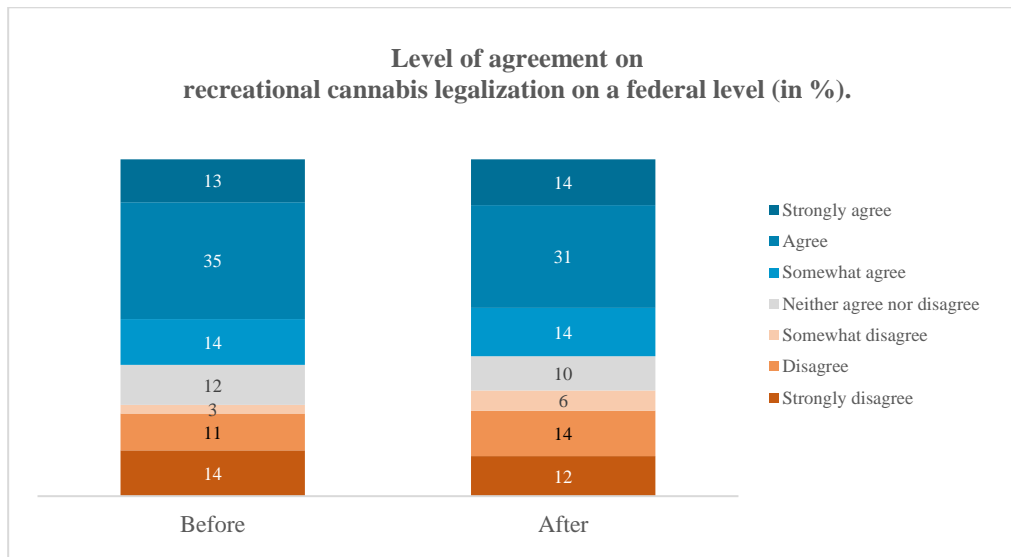


Fig. 7. Agreement Level that Cannabis Should Be Legal on Federal Before and After Training

TABLE IX: Difference in Mean Scores and Paired T-Test Before and After Training

	T3B	Mean	Std. deviation	Mean difference	Paired t-test		
					t	df	p-value
Before	61%	4.56	2.019	0.085	0.821	117	0.413
After	58%	4.47	2.016				

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree.

Further analysis was conducted to see the level of agreement on recreational cannabis legalization on a federal level. The agreement level shows a decreasing trend as age increased in both pre and post training. These differences were found to be significant in both before ($F = 4.257, p = 0.016$) and after ($F = 6.310, p = 0.003$) managers and supervisors were introduced to the brief training and educational information. Males ($M = 4.59, SD = 2.06$) tend to agree more to this statement than females [$M = 4.46, SD = 1.89$], but no significant difference was found between the two groups ($t = 0.273, p = 0.785$). Similar conclusion can be drawn in post-training where males had a higher rating than females; however, no significant difference was observed ($t = 0.383, p = 0.702$).

TABLE X: Summary Statistics and Significant Differences Before and After Training

	Before					After					
	n	T3B	Mean	SD	ANOVA/t-test statistic	p-value	T3B	Mean	SD	ANOVA/t-test statistic	p-value
Age group											
<=42 years old	40	70%	5.23	1.72	4.257	0.016	73%	5.28	1.68	6.310	0.003
43-58 years old	56	63%	4.39	2.10			55%	4.27	2.08		
59-68 years old	22	41%	3.77	2.02			41%	3.55	1.97		
Gender											
Male	94	62%	4.59	2.06	0.273	0.785	60%	4.51	2.07	0.383	0.702
Female	24	58%	4.46	1.89			54%	4.33	1.81		

T3B (top 3 boxes): total respondents who selected somewhat agree, agree, or strongly agree; SD: Standard deviation; ANOVA is used to compare mean differences between 3 groups; t-test is used to compare mean differences between 2 groups.

8. Conclusions

Question No. 5

Please indicate your level of agreement with the following statement: All states that have legalized recreational cannabis should expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

Of the managers and supervisors surveyed, 53% somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.

- 68% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.
- 48% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.
- 36% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.
- 53% of male managers and supervisors somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.
- 50% of female managers and supervisors somewhat agree, agree, or strongly agree that non-violent misdemeanor cannabis convictions should be expunged in states, districts and jurisdictions that have legalized recreational cannabis.

Null Hypothesis: States that have legalized recreational cannabis should expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

Alternative Hypothesis: States that have legalized recreational cannabis should not expunge any misdemeanor cannabis charges for persons who were convicted of misdemeanor cannabis charges in those states.

CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Question No. 6

Please indicate your level of agreement with this trend: Many U.S. States have legalized recreational cannabis and it is anticipated that this trend will continue.

Of the managers and supervisors surveyed, 85% somewhat agree, agree, or strongly agree that the current trend of increased recreational cannabis legalization will continue.

- 95% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that the current trend of increased recreational cannabis legalization will continue.
- 84% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that the current trend of increased recreational cannabis legalization will continue.
- 68% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that the current trend of increased recreational cannabis legalization will continue.
- 85% of male managers and supervisors somewhat agree, agree, or strongly agree that they believe the current trend of increased recreational cannabis legalization will continue.

- 83% of female managers and supervisors somewhat agree, agree, or strongly agree that the current trend of increased recreational cannabis legalization will continue.

Null Hypothesis: Managers and supervisors agree with the trend that more and more states are legalizing recreational cannabis.
Alternative Hypothesis: Managers and supervisors do not agree with the trend that more and more states are legalizing recreational cannabis.
CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Question No. 7

Please indicate your level of agreement with the following statement: Increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.

Of the managers and supervisors surveyed, 69% somewhat agree, agree, or strongly agree that increased legalization of recreational cannabis will lead to increased employee cannabis impairment in the workplace.

- 55% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that the legalization of recreational cannabis will lead to increased impairment while on duty.
- 80% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that the legalization of recreational cannabis will lead to increased impairment while on duty.
- 64% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that the legalization of recreational cannabis will lead to increased impairment while on duty.
- 71% of male managers and supervisors somewhat agree, agree, or strongly agree that increased cannabis legalization will lead to increased impairment while on duty.
- 58% of female managers and supervisors somewhat agree, agree, or strongly agree that increased cannabis legalization will lead to increased impairment while on duty.

Null Hypothesis: Managers and supervisors feel that increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.
Alternative Hypothesis: Managers and supervisors do not feel that increased state legalization of cannabis will lead to an increase in employees being impaired by cannabis while on duty.
CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Question No. 8

Please indicate your level of agreement with the following statement: Cannabis is currently classified as a Schedule I drug under federal law. A few examples of Schedule I drugs are: ecstasy, heroin, LSD, cannabis, and peyote (mescaline), and are considered to have the highest potential for dependance and abuse. Which category best describes your agreement that cannabis should be classified as a Schedule I drug?

Of the managers and supervisors surveyed, 26% somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.

- 15% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.
- 30% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.
- 32% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.
- 29% of male managers and supervisors somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.
- 13% of female managers and supervisors somewhat agree, agree, or strongly agree that cannabis should be classified as a Schedule I drug.

Null Hypothesis: Managers and supervisors agree that cannabis should not be classified as a Schedule I drug.

Alternative Hypothesis: Managers and supervisors agree that cannabis should be classified as a Schedule I drug.
--

CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Question No. 9

Please indicate your level of agreement with the following statement: Federal cannabis laws are too restrictive and should be modified.

Of the managers and supervisors surveyed, 59% somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.

- 73% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.
- 54% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.
- 50% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.
- 60% of male managers and supervisors somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.
- 58% of female managers and supervisors somewhat agree, agree, or strongly agree that federal cannabis laws are too restrictive and should be modified.

Null Hypothesis: Managers and supervisors feel federal cannabis laws are too restrictive and should be modified.
Alternative Hypothesis: Managers and supervisors do not feel federal cannabis laws are too restrictive and should be modified.
CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Question No. 10

Please indicate your level of agreement with the following statement: Recreational cannabis should be legalized on a federal level.

Of the managers and supervisors surveyed, 59% somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.

- 73% of managers and supervisors 42 years of age and younger somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.
- 55% of managers and supervisors between 43-58 years of age somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.
- 41% of managers and supervisors between 59-68 years of age somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.
- 60% of male managers and supervisors somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.
- 54% of female managers and supervisors somewhat agree, agree, or strongly agree that cannabis should be legal on a federal level.

Null Hypothesis: Managers and supervisors feel Recreational cannabis should be legalized on a federal level.
Alternative Hypothesis: Managers and supervisors do not feel Recreational cannabis should be legalized on a federal level.
CONCLUSION = ACCEPTANCE OF THE NULL HYPOTHESIS

Conclusions Summary

As more and more states, districts, and jurisdictions across the U.S. legalize recreational cannabis and impose employee protection laws for off-duty cannabis use, organizations will need to amend their drug and alcohol policies to ensure they do not discriminate against employees or violate these new laws. Organizations will need to abide by state, district and jurisdictional laws which can be in direct contrast with current federal cannabis law. This research study surveyed 118 managers and supervisors from across the U.S. and from various industries. This research revealed that managers’ and supervisors’ sentiment towards the

passage of recreational cannabis laws mirrors public sentiment in that managers and supervisors feel the following:

- Managers and supervisors feel misdemeanor cannabis offenses should be expunged from peoples' records.
- Managers and supervisors agree with the increasing trend and passage of recreational cannabis laws.
- Managers and supervisors do not feel that cannabis should be classified as a Schedule 1 drug.
- Managers and supervisors feel federal cannabis laws are too restrictive and should be modified.
- Managers and supervisors feel cannabis should be legalized on a federal level.
- Managers and supervisors feel cannabis use will increase and lead to more employees being impaired while on duty.

It is important to note that the younger survey participants the more they agreed that federal cannabis laws were too restrictive and more open to having misdemeanor cannabis charges expunged. Younger survey participants did not feel cannabis legalization would lead to increased impairment while on duty as compared to older survey participants. Male managers and supervisors agree more than female managers and supervisors that increased cannabis legalization will result in increased impairment in the workplace. As organizations amend their drug and alcohol policies, while drafting them to ensure compliance with these new laws, they should carefully consider manager and supervisor sentiment to ensure buy-in from leaders that are responsible for implementing and managing these policies. As managers and supervisors agree with public sentiment that cannabis laws are too restrictive and feel increased legalization will lead to potential increased cannabis impairment in the workplace, it would be prudent for leaders to consider their beliefs and concerns when amending workplace drug and alcohol policies to ensure manager and supervisor support when managing to these policies. Increased acceptance and buy-in leads to greater enforcement and ultimately a safer work environment for employees.

References

- [1] DISA. Marijuana legality by state. (2023, October 30). DISA. Retrieved from <https://disa.com/marijuana-legality-by-state>
- [2] National Highway Traffic Safety Administration. (2017). Marijuana-Impaired Driving: A Report to Congress. Retrieved from <https://www.nhtsa.gov/sites/nhtsa.gov/files/documents/812440-marijuana-impaired-driving-report-to-congress.pdf>
- [3] Phillips, J., Holland, M., Baldwin, D., Gifford-Meuleveld, L., Mueller, K., Perkison, B., Upfal, M. & Dreger, M. (2015). Marijuana in the Workplace: Guidance for Occupational Health Professionals and Employers: Joint Guidance Statement of the American Association of Occupational Health Nurses and the American College of Occupational and Environmental

Medicine. *Workplace Health & Safety*. 63(4), 139-164. Retrieved from <https://doi.org/10.1177/2165079915581983>

[4] Jones, J. (2019, June 12). In U.S., Medical Aid Top Reason Why Legal Marijuana Favored. Gallup. Retrieved from <https://news.gallup.com/poll/258149/medical-aid-top-reason-why-legal-marijuana-favored.aspx>

[5] Daniller, A. (2019, Nov 14). Two-thirds of Americans support marijuana legalization. Pew Research Center. Retrieved from <https://www.pewresearch.org/short-reads/2019/11/14/americans-support-marijuana-legalization/>

[6] Gallup Poll. (2021, Nov 4). Support for Legal Marijuana Holds at Record High of 68%. Gallup. Retrieved from <https://news.gallup.com/poll/356939/support-legal-marijuana-holds-record-high.aspx>

[7] Kacholia, S. (2022, Nov 28). A Majority of Voters Support the Provisions of the SAFE Banking Act. Data For Progress. Retrieved from <https://www.dataforprogress.org/blog/2022/11/28/a-majority-of-voters-support-the-provisions-of-the-safe-banking-act>

[8] Commisso, D. (2023, April 19). Top Cannabis Trends: Vaping, Legalization, Medical Marijuana & More. Civic Science. Retrieved from <https://civicscience.com/top-cannabis-trends-vaping-legalization-medical-marijuana-more/>

[9] Jaeger, K. (2023, May 24). Strong Majority Of New Hampshire Residents Continue to Support Marijuana Legalization—Though Opinions Are Mixed on Governor’s State-Run Store Plan. Schedule 6 Foundation. Retrieved from <https://www.marijuanamoment.net/strong-majority-of-new-hampshire-residents-continue-to-support-marijuana-legalization-though-opinions-are-mixed-on-governors-state-run-store-plan/>

[10] McCarthy, J. (2023, Aug 10). Fully Half of Americans Have Tried Marijuana. Gallup. Retrieved from <https://news.gallup.com/poll/509399/fully-half-americans-tried-marijuana.aspx>

[11] Lytle, T. (2019, Aug). Marijuana and the Workplace: It's Complicated. *HR Magazine*, Fall 2019. Retrieved from <https://www.shrm.org/hr-today/news/hr-magazine/fall2019/pages/marijuana-and-the-workplace-its-complicated.aspx>

[12] Donovan, E. (2023, March 06). More companies decide to stop screening new hires for marijuana. WSOC-TV. Retrieved from <https://www.wsocvtv.com/news/local/more-companies-decide-stop-screening-new-hires-marijuana/FUTEVD3N75APTBK3HP4MDQWX5Q/>

[13] The White House. (2022, Oct 6). Statement from President Biden on Marijuana Reform [Press release]. Retrieved from <https://www.whitehouse.gov/briefing-room/statements-releases/2022/10/06/statement-from-president-biden-on-marijuana-reform/>

[14] Medical Marijuana and Cannabidiol Research Expansion Act, H.R.8454, 117th Cong. (2022). Retrieved from <https://www.congress.gov/bill/117th-congress/house-bill/8454>

[15] Department of Health and Human Services. (2023). Recommendation to Reschedule Marijuana: Implications for Federal Policy. Retrieved from <https://crsreports.congress.gov/product/pdf/IN/IN12240>

- [16] Discrimination in employment: use of cannabis, AB-2188, 2021-2022, California State Legislature. (2022). Retrieved from https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB2188
- [17] An Act Concerning Responsible and Equitable Regulation of Adult-Use Cannabis, Connecticut Senate Bill No. 1201. (2021). Retrieved from <https://www.cga.ct.gov/2021/act/Pa/pdf/2021PA-00001-R00SB-01201SS1-PA.PDF>
- [18] Cannabis Employment Protections Amendment Act of 2022, D.C. Law 24-190. (2022). Retrieved from <https://code.dccouncil.gov/us/dc/council/laws/24-190>
- [19] Montana Marijuana Regulation and Taxation Act, Montana Initiative I-190. (2021). Retrieved from <https://sosmt.gov/wp-content/uploads/I-190.pdf>
- [20] Regulation and Taxation of Marijuana Act, Nevada Ballot Question 2. (2016). Retrieved from <https://www.nvsos.gov/sos/home/showpublisheddocument/3294/637121034822470000>
- [21] Ceballos v. NP Palace, LLC, 138 Nev. Adv. Op. 58 (Nev. 2022). Retrieved from <https://casetext.com/case/ceballos-v-np-palace-llc>
- [22] New Jersey Cannabis Regulatory, Enforcement Assistance, and Marketplace Modernization Act, New Jersey Legislature C.24:6I. (2020). Retrieved from <https://www.nj.gov/cannabis/documents/CREAMM%20Act.PDF>
- [23] Office of Cannabis Management. (2023, Oct 10). Marijuana Regulation and Taxation Act (MRTA) - Laws and Regulations: Adult Use, Medical Cannabis, and Cannabinoid Hemp Programs. New York State Government Site. Retrieved from <https://cannabis.ny.gov/marihuana-regulation-and-taxation-act-mrta>
- [24] The Rhode Island Cannabis Act, RI H7593. (2022). Retrieved from <http://webserver.rilin.state.ri.us/BillText/BillText22/SenateText22/S2430Aaa.pdf>
- [25] Vermont Office of the Attorney General Civil Rights Unit. (2018). Guide to Vermont's Laws on Marijuana in the Workplace. Retrieved from <https://ago.vermont.gov/sites/ago/files/wp-content/uploads/2018/06/Employer-MJ-Guidance-TOC.pdf>
- [26] H. R. 18583, Comprehensive Drug Abuse Prevention and Control Act of 1970, (1970). Retrieved from <https://www.govinfo.gov/content/pkg/STATUTE-84/pdf/STATUTE-84-Pg1236.pdf>
- [27] Drug Free Workplace Act, 41 U.S.C § 701, (1988). Retrieved from <https://www.govinfo.gov/content/pkg/USCODE-2009-title41/pdf/USCODE-2009-title41-chap10.pdf>
- [28] Omnibus Transportation Employee Testing Act of 1991, 49 U.S.C. § Title 5, (1991). Retrieved from https://www.transportation.gov/sites/dot.gov/files/docs/199111028_Omnibus_Act.pdf
- [29] Federal Motor Carrier Safety Administration Act, 49 U.S.C. § 113 (1999). Retrieved from <https://www.law.cornell.edu/uscode/text/49/113>

- [30] Ogden, D. (2009). Memorandum Regarding Investigations and Prosecutions in States Authorizing the Medical Use of Marijuana. Retrieved from <https://www.justice.gov/sites/default/files/opa/legacy/2009/10/19/medical-marijuana.pdf>
- [31] Swart, J. (2009). DOT Office of Drug and Alcohol Policy and Compliance Notice. Retrieved from https://www.transportation.gov/sites/dot.gov/files/docs/ODAPC_medicalmarijuan NOTICE.pdf
- [32] Cole, J. (2013). Guidance Regarding Marijuana Enforcement. Retrieved from <https://www.justice.gov/iso/opa/resources/3052013829132756857467.pdf>
- [33] Coats v. Dish Network, CO 44 No. 13SC394 (2015). Retrieved from https://www.courts.state.co.us/userfiles/file/Court_Probation/Supreme_Court/Opinions/2013/13SC394.pdf
- [34] Session, J. (2018). Memorandum Regarding Marijuana Enforcement. Retrieved from https://www.justice.gov/d9/press-releases/attachments/2018/01/04/ag_marijuana_enforcement_1.4.18_0.pdf
- [35] DOT. (2020). DOT Office of Drug and Alcohol Policy and Compliance Notice. Retrieved from https://www.transportation.gov/sites/dot.gov/files/2020-02/ODAPC_CBD_Notice.pdf
- [36] H. R. 8454, 117th Cong, Medical Marijuana and Cannabidiol Research Expansion Act, (2022). Retrieved from <https://www.congress.gov/117/bills/hr8454/BILLS-117hr8454eh.pdf>

Author Contributions

Steven Boyd was the investigator for this research. Steven is a doctoral student at Capitol Technology University and conducted this research as part of his degree program. Steven conducted the survey, reviewed the data from the research and wrote this document with all applicable findings, literature, and recommendations.

Dr. Drew Hinton is an Adjunct Professor and OSH Advisory Board Member at Capitol Technology University and serves as Steven's dissertation chair. Dr. Hinton assisted with reviewing the article and providing advice on final revisions.

All authors had approved the final version.