FROM PROHIBITION TO PROGRESS: THE JOURNEY TOWARDS DECRIMINALIZING PSYCHEDELICS AND TRANSFORMING PUBLIC HEALTH

by

Samuel Xavier Junk

HONORS CAPSTONE

Submitted to Texas State University in partial fulfillment of the requirements for graduation in the Honors College May 2023

Supervisor:

Doctor Nicholas Carter

Second Reader:

Doctor Frank K. Reilly

ABSTRACT

Since the beginning of recorded history humans have utilized psychedelics for promoting wellness and treating illness. In more recent times, the War on drugs drove these practices into the underground by stigmatizing drug use and in turn users face an unregulated and dangerous drug market. This has prevented the safe and therapeutic use of psychedelics for people suffering from a myriad of illnesses. This thesis argues that the decriminalization of psychedelics is necessary for ensuring public safety and promoting responsible drug use. First, I will provide the history of popular psychedelics and how it shaped the current psychedelic cultures' shift to the underground. Second, I will examine the current research that points towards the therapeutic potential of psychedelics and discuss the pathways to legalization under the medical model of the FDA in the United States. Third, I will discuss the current status of psychedelic decriminalization in the United States and how this framework promotes beneficial practices for the use of psychedelics. Overall, this thesis seeks to provide a broad yet comprehensive understanding of psychedelics, the benefits and risks involved and the implications of decriminalization for the future of psychedelics and humanity.

Introduction

Since the beginning of recorded history and before, humans have utilized psychedelics as a means to promote wellness, treat illness, and explore the depths of human consciousness.

These ancient practices, once deeply embedded into cultures around the world, have been pushed into the shadows by modern governments intent on waging an uninformed War on Drugs. As a result, once vibrant and healing traditions have been stigmatized and restricted, leaving users at the mercy of an unregulated and dangerous drug market. It is crucial that we reevaluate and reeducate our notions of these powerful substances and recognize the potential benefits they hold for individuals and humanity as a whole.

This thesis seeks to explore the necessity of reforming drug laws and decriminalizing psychedelics to ensure public safety and promote responsible drug use. First, we will dive into the rich history and culture of popular psychedelics by tracing the trajectory that led these substances into the underground. Secondly, we will turn our attention to modern and current research, which has begun to illuminate the powerful therapeutic potential of psychedelics. Next, I will propose a case for the reform and decriminalization of psychedelics by illustrating the damages due to the War on Drugs, examining the current state of psychedelic decriminalization in the United States, and how drug reform frameworks can promote beneficial practices in the use of psychedelics. Finally, we discuss the pathways to legalization under the medical model of the FDA in the United States and announce the progress of many towards this mission.

By offering a comprehensive overview of the benefits, risks, and implications of psychedelic drug reform, this thesis aims to contribute to a new, yet ancient, culture that better understands the role these substances can play in the future of medicine and human well-being.

Psychedelics: An Overview

Literature Review

Throughout this section, I will define psychedelics, how they are used, and describe their different classifications. I have chosen certain psychedelics throughout my research due to how they interface with popular culture and current drug reform policies. As such, I reviewed literature from psychedelic pioneers Richard Evan Schultes, Albert Hoffman, Ann Shulgin, and Alexander "Sasha" Shulgin. Additionally, I reviewed the history of modern psychedelic psychiatry and found the use of Moheb Costandi's article to be most helpful in understanding the early stages of psychedelic assisted therapy (2014). In their seminal book titled *Plants of the* Gods: Their Sacred, Healing, and Hallucinogenic Powers, Schultes and Hoffman combined their expertise in ethnobotany and chemistry. Originally published in 1979 and revised in 1992, *Plants* of the Gods still stands the test of time by establishing the most comprehensive catalog of naturally occurring psychedelics, how they are used, where they are found, and which chemical compounds are responsible for their effects (Schultes & Hofmann, 1992). For chemically synthesized psychedelics, I utilized Shulgin and Shulgin and their books PiHKAL: A Chemical Love Story and TiHKAL: A Continuation. Shulgin and Shulgin use both scientific rigor in describing the chemical nature of the compounds mixed with their subjective experiences throughout the books to provide a solid foundation for psychedelic explorers for decades to come (1991; 1997). Overall, these references provide the necessary scientific groundwork for examining the controversial topic of psychedelics.

What are Psychedelics?

First, it is important to understand just what psychedelics are and what is being referred

to by the term psychedelic. Originally coined by British psychiatrist Humphry Osmond in a letter to Aldus Huxley, the term psychedelic is translated from Greek meaning *Mind-Manifesting* (Costandi, 2014) Typically, substances referred to as *Psychedelic* do so by inducing an altered state of mind and body. These substances include, but are not limited to, cannabis (*Cannabis sativa*), magic mushrooms (Usually *Psilocybe cubensis*), LSD or acid (Lysergic acid diethylamide), DMT (N,N-Dimethyltryptamine), 5-MeO-DMT (5-methoxy-N, N-dimethyltryptamine), MDMA (3, 4-methylenedioxy-methamphetamine), mescaline (3,4,5-trimethoxyphenethylamine) containing cacti such as peyote (*Lophophora williamsii*) and san pedro (*Echinopis pachanoi*), and ketamine (Schultes & Hofmann, 1992). While this list could go on at great length, this research is focused on those listed above, as they are the most thoroughly researched and used in popular culture.

How are they consumed?

Within the catalog of psychedelic substances there are many methods of intake. While the most common form tends to be via oral ingestion, other methods may be preferred depending on the substance or desired effect. Substances that are typically imbibed orally include magic mushrooms, LSD, peyote, san pedro, and sometimes cannabis (Schultes & Hofmann, 1992). When ingested orally, these substances can have a delayed onset of effects that can take anywhere from fifteen minutes to several hours. DMT however, can also be ingested orally but requires the combination of other substances to ensure an onset of symptoms. Alternatively, there are plants used in Amazonian culture containing a mixture of DMT and 5-Meo-DMT that are snuffed or blown into the users nose with an almost immediate onset of effects (Schultes & Hofmann, 1992). Typically, DMT, 5-Meo-DMT, and cannabis are combusted or vaporized, and

the effects are almost instantaneous. Users will typically choose these methods of intake over others due to the perceived dangers and stigmas of other methods. These less-common methods of intake include insufflation (snorting), intramuscular injection, and intravenous injection. Ketamine for example, is often given via IM or IV injection in clinical settings but is more commonly insufflated recreationally. The preference for IM or IV in clinical settings is due to the accuracy of dosage versus insufflation which often intervenes with the titration of the drug into the body and provides unreliable onset of symptoms and effects. Through the methods of intake users are making a choice, either consciously or unconsciously, that may lead to an undesired experience.

The various methods of intake are oftentimes chosen based on the desired onset of effects and the differing levels of titration that the method grants but often this choice is due to the cultural norms and stigmas surrounding drug use. While experienced users may choose the more efficient and effective method of intake, novice users may choose a more culturally appropriate method due social pressure and to lack of knowledge. Methods of intake such as IM or IV injection may provide novice users with a more efficient, desirable, and replicable psychedelic experience but there are dangers associated with such methods such as infection, overdose, and damage to tissues or veins. These dangers may be easily avoided if there were less stigma surrounding the injection of drugs and users were able to access information, clean needles, and unaltered substances.

Throughout history, becoming educated on the use of psychedelics required either vast experimentation or help from a specialist. Typically, these specialists were priests or shamans who spent years of their life dedicated to understanding the use of various substances or a trained therapist with official accreditation. Today, such specialists are mostly inaccessible and to gain

knowledge on how to use psychedelics safely and effectively, one must either experiment themselves, or look to experienced practitioners for guidance. Unfortunately for those curious about psychedelics, the idea of experimenting with these substances comes with great risk and makes psychedelic experimentation inaccessible for most. Luckily, with the adoption of the internet in the 1990's, internet forum Erowid.org was born and became a place for open dialogue about psychedelic use. Dedicated to documenting the relationships between psychedelics and humans, erowid.org is one of the most significant resources on psychedelics and how they are used. On the site, one can find detailed trip-reports of almost every psychedelic known to man and often describes dosage and time-stamped journal entries conveying the objective and subjective experiences of the users. Sites like erowid.org and reddit.com have provided a necessary public resource for those interested in psychedelic experimentation and, through the public forum, have generated countless conversations about effective and safe psychedelic use. Since peer-reviewed literature is limited due to the ban on psychedelics in the 1970's, forums like these have allowed generations of explorers to venture into the vast world of psychedelics without a specialist and instead rely on the guidance of a variety of people from around the world. Although reddit.com and erowid.org provide a necessary and helpful public resource for those interested in psychedelic exploration, it is important to recognize that these stories are purely anecdotal and do not have the rigor of proper scientific research needed for safe exploration. However, it is certainly better that the public does have an open forum to discuss the use of these illicit substances because without any structure or information, using psychedelics can be dangerous and even life-threatening to the consumer.

Classes of Psychedelics

Psychedelics come in many forms and cover a broad spectrum of effects for the user ranging from hallucinogens to dissociatives. In most cases, more thorough research has been done in understanding the effects of so-called hallucinogens because of that, this research is broadly focused on these hallucinogens. Psychedelics are often categorized into two classes of drugs known as tryptamines and phenethylamines. These two classifications are best described by psychedelic pioneers Alexander "Sasha" Shulgin and Ann Shulgin in their books PiHKAL: A Chemical Love Story and TiHKAL: A Continuation. In PiHKAL, Shulgin and Shulgin describe phenethylamines as: "1: A naturally occurring compound found in both the animal and plant kingdoms. It is an endogenous component of the human brain. 2: Any of a series of compounds containing the phenethylamine skeleton, and modified by chemical constituents at appropriate positions in the molecule" (Shulgin & Shulgin, 1991, p. 6). This includes psychedelic drugs such as mescaline, MDMA, and 2C-B (4-BROMO-2,5-DIMETHOXYPHENETHYLAMINE). In TiHKAL, Shulgin and Shulgin describe tryptamines as: "1: A naturally occurring compound found in both the animal and plant kingdoms. It is an endogenous component of the human brain. 2: Any of a series of compounds containing the tryptamine skeleton, and modified by chemical constituents at appropriate positions in the molecule" (Shulgin & Shulgin, 1997, p. 7). This includes psychedelic drugs such as LSD, DMT, 5-MeO-DMT, and the active compounds found in magic mushrooms, psilocybin and psilocyn.

As outlined by Shulgin and Shulgin above, key differences in the chemical structures of these two classes of compounds are apparent. However, For the sake of this research and simplicity, it is more helpful to describe some of the similarities and differences that tryptamines and phenethylamines have on the subjective experience of the user and at the neurochemical

level. Similarly, both classes of compounds have the ability to produce profound changes in perception, cognition, mood, emotions and the thought processes of the effected individual. Both exert these psychoactive effects by interacting with the neurotransmitter systems in the brain. However, the key differences that cause these profound effects is likely due to the different neurotransmitters that are involved in the process of the psychedelic experiences. Tryptamines produce their effects through the serotonin system. Because of their structural similarity to serotonin, tryptamines have an affinity to the 5-HT2A receptor and thus have strong effects on mood and emotion like serotonin. Phenethylamines tend to primarily work on the dopamine system but also have some effects on the epinephrine and norepinephrine systems and to a lesser degree, the serotonin system as well. As a result of phenethylamines structural similarities to these neurotransmitters, the effects are typically more associated with increased energy levels and emotional openness in addition to some of the reported effects of tryptamines like changes in perception and cognition.

Other psychedelics exist that do not fit into the categories of tryptamines and phenethylamines such as THC (one of the numerous active compounds in *Cannabis sativa*) and Ketamine. Some may not consider the effects cannabis to be psychedelic, but anyone who has consumed too many edibles or smoked one too many puffs of a joint could strongly argue otherwise. The effects of cannabis and THC can vary greatly from person to person and are heavily dose dependent. The effects can range from mild euphoria to extreme paranoia depending on differing variables. Ketamine on the other hand, is undoubtably psychedelic. This drug is classified as a dissociative, is typically used medically as an anesthetic, and is often preferred by users. Ketamine has a higher safety profile than other anesthetics because it does not depress respiration. Ketamine use is on the rise and is now being used in clinics across America

to treat depression, anxiety, chronic pain, and Post Traumatic Stress Disorder (PTSD) (Within Center, 2022).

Ancient and Historical Uses of Psychedelics

Literature Review

This section focuses on psilocybin mushrooms, mescaline containing cacti, LSD, DMT, and MDMA due to the rich history and their roles in creating current psychedelic culture. For information on the history of psilocybin mushrooms, I used the works of Borhegyi and Borhegyi-Forrest in their article titled *Mushroom Intoxication in Mesoamerica* and R. Gordon Wasson's Time magazine article titled *Seeking the Magic Mushroom* (1957; 2019). I choose the literature of Borhegyi and Borhegyi-Forrest due to their archaeological expertise and because they utilized historical references to put their findings into modern context (2019). Additionally, their article provides an ancient history of psilocybin mushrooms and how the early colonists created the initial fear towards altered states of consciousness (2019). This fear was dissolved into curiosity by the famous Times article of Wasson in 1957 which provoked psychedelic exploration around the world.

Mescaline containing cacti such as peyote and san pedro provide a supplemental addition to this research by further asserting the use pf psychedelics in ancient times. In this section, I reference the works of Carolyn Boyd and Kim Cox in their foundational work deciphering the White Shaman Mural as well as Castro-Klarén's archaeological understanding of the site of Chavín de Huántar, Peru (2021; 2021). Boyd and Cox thoroughly describe the rich creation narrative depicted on the walls of the White Shaman rock shelter, along the Pecos River in southeast Texas, that indicate the use of peyote in ancient times (2021). In their 2021 article,

Castro-Klarén illustrates the use of the san pedro cacti in the iconography found within the site that dates back to 900 BC. The use of mescaline containing cacti for some kind of religious purpose is evident at both the White Shaman Mural and Chavín de Huántar, and thus suggests the important role these plants played in ancient times (Boyd & Cox, 2021; Castro-Klarén, 2021).

Although the use of LSD is recent, the history of this psychedelic compound is quite elaborate. To best illustrate the story of LSD, I turned to the biography of its discoverer Albert Hoffman in the *Mystic Chemist: The Life of Albert Hoffman and His Discovery of LSD* (2018). I choose this book for my research because it proved to be the most accurate history of Hoffman's discovery of LSD and most importantly, how Timothy Leary and Richard Alpert played a significant role in the banning of the substance. Overall, this resource provided a reliable timeline for the events that helped develop modern psychedelic culture.

Rick Strassman and his work with DMT is the most compelling research on the substance to date. For my brief section on DMT, I choose to use Strassman's books *DMT: The Spirit Molecule: A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences* and *The Psychedelic Handbook: A Practical Guide to Psilocybin, LSD, Ketamine, MDMA, and DMT/Ayahuasca* (2001; 2022). These two books illustrate the experiments and protocols developed by Strassman and provide an intriguing perspective into the psychedelic experience in addition to providing a thorough history of DMT research (2001; 2022).

MDMA is the most relevant psychedelic in the current conversation of decriminalizing and legalizing psychedelics. For this reason, I have chosen to highlight the works of Rick Doblin with MDMA due to his deep affiliation and current research on the subject. In his 2019 TED Talks found on YouTube, *The Future of Psychedelic-Assisted Psychotherapy*, Doblin shares his

story and involvement with MDMA research. This video gives a promising update to the future of psychedelic research and is grounded by his humorous, yet scientific approach (Doblin, 2019). Additionally, I have used the most recent study published on MDMA assisted therapy as it provides the most significant findings in recent psychedelic research that includes the efficacy of the treatment (Mitchell et al., 2021).

Psilocybin Mushrooms

Magic mushrooms, or mushrooms containing the psychedelic tryptamine psilocybin and psilocin, have a long history of use. The first written accounts of magic mushrooms came from the Spaniard chronicler Bernal Díaz del Castillo. Castillo was a soldier in the army of the infamous Hernán Cortés and the first to describe the great city of Tenochtitlan, now known as Mexico City (Borhegyi & Borhegyi-Forrest, 2019). According to Castillo, the Aztecs participated in ceremonies where they consumed hallucinogenic mushrooms, known as teonanácatl or Gods Flesh to the Nahuatl speakers in Mesoamerica (Borhegyi & Borhegyi-Forrest, 2019). The arrival of Cortés did not happen until 1519, but there is evidence to suggest the use of mushrooms much earlier. Moving further east to the highlands of Guatemala, archaeologists and collectors have found small stone sculptures that clearly resemble phallic like psychedelic mushrooms in archaeological contexts, suggesting the possibility of a fertility and mushroom cult dating back to about 1000 BC (Borhegyi & Borhegyi-Forrest, 2019). Magic mushrooms were mostly forgotten about by anthropologists until they were later brought to the attention of the world by R. Gordan Wasson in his 1957 Time Magazine article, Seeking the Magic Mushroom. Wasson, a vice president of J.P. Morgan and Chase, wrote an article that changed the course of psychedelic history forever by exposing an ancient tradition. During his

time in southern Mexico, Wasson participated in mushroom ceremonies facilitated by two curanderas, or shamans, one later identified as Maria Sabina, a Mixtec speaking Oaxaca native. Maria Sabina, known as Eva Mendez in article, is responsible for giving Wasson and his friend Allan Richardson the first dose of magic mushrooms to non-natives (Wasson, 1957). This set-in motion the spread of psychedelic mushroom culture around the world (Fantastic Fungi, 2023). Due to the vast amount of publicity the article created, hippies, counter-culturalists, and other curious travelers flooded into the Oaxacan mountains in search of magic mushrooms and the mystical experiences described by Wasson (Fantastic Fungi, 2023). Despite the pushback and controversy, Wasson's article helped bridge the gap between the ancient traditions of the Mixtec and the modern world.

Mescaline Containing Cacti

Similarly, the mescaline containing cacti, Peyote and San Pedro, have a long history of ancient use. Peyote is a small button cactus found throughout the desert climates of northern Mexico and southwest Texas. Here it has been used for thousands of years and spans many cultures in North America (Boyd & Cox, 2021). In the rock-shelters of the Pecos River, three specimens of peyote containing peyote-effigies were found and carbon dated to approximately 5195 years ago (Boyd & Cox, 2021). This material evidence, combined with Boyd and Cox's dedicated work interpreting the White Shaman Mural and other rock art found in the region, suggests a complex culture of peyote pilgrimage and use among the Huichol, Nahual, and Maya cultures (2021).

San Pedro is a tall torch cactus found throughout the Andes Mountains of South America where it is often referred to as Huachuma. History of its use can be traced back to approximately

900 BC at the archaeological site of Chavín de Huántar in central Peru (Castro-Klarén, 2021). Inside one of the labyrinth temples at Chavín de Huántar, an anthropomorphic figure exists that depicts San Pedro being used as a staff (Castro-Klarén, 2021). While this evidence does not directly indicate the material presence of the cactus itself, it does suggest the use of San Pedro in some form of ceremony within the temple. It is likely that San Pedro was used there in some form of transformation ritual due to its close association and depictions alongside the jaguar, a known symbol of transformation (Castro-Klarén, 2021).

LSD

Albert Hofmann was the first to discover the effects of LSD and did so by accident. LSD, or lysergic acid diethylamide, was first produced by the Swiss chemist Albert Hofmann in the Sandoz labs of Switzerland on November 16th, 1938 (Hagenbach & Werthmüller, 2011). The initial synthesis and trials of LSD were done on animals to test the effects of the novel substance as a cardiovascular stimulant. While LSD proved to be effective it was not as potent as other researched and available drugs, thus, it was put aside. However, Hoffman described an irrational feeling of interest in the compound that he could not let go of. Five years after the initial synthesis, Hoffman trusted his curiosity and scheduled another synthesis of LSD for April 16th, 1943 (Hagenbach & Werthmüller, 2011). It is suspected that during the synthesis on April 16th Hofmann accidentally transferred LSD onto his fingertips thus entering his body (Hagenbach & Werthmüller, 2011). To confirm his suspicion that LSD caused the effects that followed the first accidental dose, Hofmann decided to intentionally ingest 250 micrograms of LSD just a few days later on April 19th (Hagenbach & Werthmüller, 2011). Little did he know this novel compound was much more potent than the more researched psychoactive compound mescaline. This high

dose of 250 micrograms would send him on a wild bicycle ride that changed history forever. A few hours after ingestion, Hofmann experienced a full-blown crisis and wanted to be in the comfort of his own home. At this point, Hofmann needed assistance getting home and enlisted his lab assistant Susi Ramstein to help him travel to his residence. Ramstein hopped on her bicycle and peddled quickly to keep up with the frantic chemist (Hagenbach & Werthmüller, 2011). Hofmann experienced what most people would call a bad trip, his world filled with dark visions and extreme discomfort. Luckily, once this discomfort ended, Hofmann was met with feelings of happiness and thankfulness (Hagenbach & Werthmüller, 2011). Upon waking up in the morning, Hofmann reported feelings of physical tiredness yet also mental clarity and pleasure from life (Hagenbach & Werthmüller, 2011). From this day on, April 19th is known as the first intentional LSD trip and celebrated as bicycle day around the world. It would not be until the 1960's when LSD would become the subject of mainstream culture and ridicule. In October 1960, Harvard professors Timothy Leary and Richard Alpert founded the Harvard Psychedelic Research Institute. At first, the research institute focused on experiments using the psychedelic compound psilocybin and found its way into the Concord Prison. In these experiments, Leary and Alpert would give psilocybin to the inmates and perform activities designed to help them alter their behavior to be more socially acceptable. Leary and Alpert reported remarkable transformations and results within their research (Hagenbach & Werthmüller, 2011). It was not until the writer and friend of Leary, Aldous Huxley, encouraged Leary to share his findings with Albert Hofmann that LSD came into the picture (Hagenbach & Werthmüller, 2011). This recommendation mixed with pressure from colleagues eventually led to Leary trying LSD and having an even more profound experiences than those under the influence of psilocybin. Around the same time, Leary and Alpert started to get a lot of attention

from the students and staff of Harvard. Students were flocking into Leary and Alpert's offices wanting to participate in the psilocybin experiments. However, Leary and Alpert were instructed by the university to not let freshmen participate in the psilocybin research. Although they followed this request within their official research, many students participated in the druginduced parties thrown by Leary and Alpert. This eventually led to freshman Andrew Weil writing an exposé that revealed the misuse of psilocybin among Leary and Alpert, eventually leading to the dismissal of them both from Harvard (Hagenbach & Werthmüller, 2011).

After their dismissal, Leary and Alpert were keen on continuing their research outside of the university setting. Unfortunately for them, their supply of LSD and psilocybin was halted due to their misconduct at Harvard. They lacked the proper credentials needed to order the drugs from Sandoz again. In letters between Leary and Hofmann, it is revealed that Hofmann had some hesitancy in being the supplier of such vast quantities of LSD and psilocybin (Hagenbach & Werthmüller, 2011). To circumvent the necessary required documents for their order of LSD and psilocybin, Leary and company managed to secure a different source for the drugs and continued on with their research underground. The public attention that they received after this was astounding. Leary and Richard Alpert, now known as Ram Das, continued their journeys to expand consciousness across America but eventually were met with more serious legal consequences. Leary was in and out of prison and Ram Das spent the next chapter of his life studying philosophy, yoga, and staying out of trouble. In 1970 President Richard Nixon signed into law the Controlled Substances Act, which set a clear message that the United States government considers psychedelics to be dangerous and, based on their classification, to have no known medical benefits. This changed the course of psychedelic research and immediately halted any scientific progress for years to come.

DMT and Rick Strassman

After the possession of psychedelics was made criminal in 1970, no further psychedelic research was conducted until that of Rick Strassman in 1990 (Strassman, 2001). After two decades of research being put on pause by the Nixon administration, Strassman began DEA and FDA-approved research on DMT and psilocybin to investigate the effects of these compounds on healthy volunteers (Strassman, 2022). These studies, conducted over five years and funded by the National Institute of Health, ignited a new wave of psychedelic research, and opened the doors of perception for legal and scientific exploration once again. Throughout the lifespan of Strassman's work on DMT, over 400 doses were administered. Although brief, Strassman's work on psilocybin and DMT set up the necessary protocols for administering this drug in future research (Strassman, 2022).

MDMA and Rick Doblin

The one student most affected by the decision to ban psychedelics in the United States Government was Rick Doblin. During his freshman year of college, Doblin experimented with LSD, Mescaline, and other psychedelic drugs like MDMA (Doblin, 2019). Unfortunately for Doblin, the ban stopped him from pursuing a career as a psychedelic therapist and led to him shifting his focus, and in turn dedicating his life to changing these laws. After receiving his undergraduate degree in psychology from New College of Florida, Doblin started the non-profit organization MAPS, the Multidisciplinary Association for Psychedelic Studies, in 1987 with the goal of making MDMA legal through the FDA. Doblin later went on to get a Ph.D. in public policy from Harvard and focused his research on the medical uses of psychedelics to fight back against the Controlled Substances Act that claims no known medical benefits exist from schedule

I drugs such as cannabis, LSD, DMT, and psilocybin. Doblin saw the benefits of MDMA when combined with assisted therapy (AT) and moved forward in his intention of legalizing psychedelics with MAPS. As of 2021, MAPS has completed their first phase three trials with the FDA using MDMA AT and have shown the efficacy of this treatment on individuals with PTSD (Mitchell et al., 2021).

Modern Psychedelic Research

Literature Review

While there is a vast library of new psychedelic research emerging, for the purposes of this research, I choose to highlight research on MDMA, LSD, Ketamine, and cannabis due to the popularity and the varying degree of legality of these substances. Although mentioned above, it is important again to emphasize the success of MAPS in their first phase three trial with the FDA and for that reason I choose to further discuss the results of the 2021 Mitchell et al. paper. The results of this study have the ability to directly affect the scheduling of MDMA and will be discussed further in the final section. Additionally, MAPS sponsored promising LSD research in Switzerland as shown in the 2014 publication Safety and Efficacy of Lysergic Acid Diethylamide-Assisted Psychotherapy for Anxiety Associated With Life-threatening Diseases (Gasser et al.) I included this in my research as it demonstrated the safety of LSD therapy and thus paves the way for more intensive studies to better understand the potential benefits of treatments that include LSD (Grasser et al., 2014). Ketamine, however, is already being used in the medical industry. For this reason, I choose to utilize less conventional resources to better understand how ketamine

is being used. In my review, I found the popular site Drugs.com and Austin's own Within Center to provide the necessary information to describe how and why ketamine is being used medically (2019; 2022). Furthermore, I found information pertaining to the safety and efficacy of a ketamine through the review of a novel pharmaceutical drug, Spravato (Jalloh, 2020).

Finally, in my research of cannabis, I choose to focus not on the benefits but instead the risks involved in the use of cannabis. My decision to research the risks was multifaceted. First, cannabis is used in popular culture, and everyone has their own anecdotal reports of how this plant helps them. Secondly, research within the United States and other regions is still heavily limited due to the similar scheduling of the drug globally. Finally, cannabis seems innocuous, but literature is starting to emerge that tells otherwise. For these reasons, I choose to highlight popular science podcast *The Huberman Lab*. In his 2022-episode titled *The Effects of Cannabis (Marijuana) on the Brain and Body*, Dr. Andrew Huberman uses his scientific and non-biased skills to clearly disseminate the current literature on cannabis. In this podcast, Huberman references a 2020 study by Petrili et al., that highlights some alarming risks in using cannabis which I elaborate on below.

MDMA

Psychedelic research has picked up momentum in the twenty first century. While most psychedelics are still classified as a schedule I drugs under the Controlled Substances Act, researchers are utilizing the necessary pathways to study psychedelics under government guidance. To study these drugs in clinical settings within the jurisdiction of the United States, psychedelic researchers must follow strict guidelines. Through these legal pathways, research is being conducted to better understand the use of various psychedelic substances on a plethora of

mental health issues. Among these are the use of MDMA and cannabis for treating PTSD, LSD for anxiety, and the DMT-containing brew, Ayahuasca, for addiction (MAPS, 2023) Of the emerging research on psychedelics, MAPS is paving the way for the legal use of psychedelics within medical contexts. In 2021, MAPS completed their first placebo controlled, double-blind, phase three trial with the FDA for the use of MDMA Assisted Therapy to treat severe PTSD (Mitchell et al, 2021). This treatment was granted breakthrough-therapy designation by the FDA due to its promising results in treating PTSD in comparison to other known treatments (Mitchell et al., 2021). In this treatment, participants are given three doses of MDMA over the course of a few months while in the presence of a trained therapy team. It is important here to highlight the context in which the MDMA is given. The study was not conducted to see just the effects of MDMA on participants suffering from severe PTSD, but rather to investigate the effects of the drug in conjunction with assisted psychotherapy. MDMA, like other psychedelics, is just a tool. The context in which it is used is important in its application. MAPS' study specifically emphasized that the combination of MDMA and manualized therapy was responsible for the reduction of PTSD symptoms (Mitchell et al., 2021).

The MAPS study on MDMA AT emphasized that the context in which psychedelics are used is one of the most important things to consider when looking at the efficacy of treatment (Mitchell et al., 2021). In this trial, MDMA is administered in conjunction with therapy throughout an 18-week period (Mitchell et al., 2021). Upon completion of the trial, data showed the participants who received the placebo in addition to therapy still yielded positive results in treating severe PTSD. However, for those who took the combination of MDMA with manualized therapy, it was apparent that the combination yielded better outcomes. This is especially clear when looking at the presence of PTSD symptoms like suicidal ideation (Mitchell et al., 2021).

By combining the effects of MDMA with psychotherapy, researchers at MAPS have created a treatment protocol that is showing great promise in treating PTSD when compared to the results of other treatments that are available (Mitchell et al., 2021).

The results of the FDA phase three trial of MDMA AT have provided significant evidence to support further research on this treatment. Of the 42 people in the study that were given MDMA AT, 28 of them no longer met the criteria for PTSD and an additional 12 of 42 were considered to be in remission (Mitchell et al., 2021). It is also important to note the safety of participants within the trial. The group that received MDMA AT, that is, the participants that did not receive the placebo, reported no increase in adverse events were reported (Mitchell et al., 2021). These results represent a huge breakthrough in psychedelic research by indicating that not only can psychedelics be used effectively in the treatment of mental health disorders, but also, they can do so without the cultural stigma of high risk that is typically associated with their use. While the research on MDMA is far from over, MAPS has helped set new precedent throughout their research on how to conduct safe and effective therapy using illicit compounds like MDMA. Furthermore, it is worth celebrating that MAPS is hastily continuing their research on MDMA and supporting others in their research on other psychedelic compounds.

LSD

In addition to investigating the use of MDMA to treat PTSD, MAPS has also sponsored research on the use of LSD. In 2014, researchers in Switzerland examined the safety and efficacy of LSD assisted psychotherapy on patients suffering from anxiety associated with life-threatening diseases (Gasser et al.) This study was the first of its kind done on the therapeutic use of LSD in the 40 years since psychedelic prohibition. In this double-blind, active placebo-

controlled study, non-placebo participants were first given psychotherapy sessions without the use of LSD and later received two LSD assisted psychotherapy sessions. Of the participants who received LSD, the results indicated a significant reduction in the levels of anxiety that they experienced on a day-to-day basis (Grasser et al., 2014) The results of this study also revealed that no adverse events occurred throughout the treatment. This was likely due to the extensive criteria patients had to meet to be included in the trial in addition to extensive preparation for the treatment. Since the focus on this study is based on evaluating the safety and efficacy of this treatment, the population size was limited. However, the results on safety and efficacy are promising enough to prompt future investigations.

This study represents a huge win for psychedelic researchers. Since the regulation of psychedelics with the Controlled Substances Act of 1970, very little research has been conducted on the use of LSD. By demonstrating the safety of LSD, researchers are helping shift the narrative about psychedelics away from the stigma they received in the 1960's and into the realms of real scientific inquiry. Studies like this may pave the way for the United States' government to reconsider the classification of LSD away from schedule I into a category that would allow more people to access them through medical channels. Given the current state of mental health around the world since the COVID-19 pandemic, it is an urgent matter to discuss and research possible treatments for various mental health disorders. While this treatment has not made it to the mainstream health market yet, studies like this encourage lawmakers and medical professionals to reconsider the reputation of psychedelics and promote reclassification and further scientific investigations.

Ketamine

Ketamine, however, is being used legally throughout the United States. Since its approval by the FDA in the 1970's, ketamine has been used as an anesthetic for humans and animals. Due to the known medical benefits of Ketamine, it is classified as a schedule III drug in the United States and therefore is allowed to be prescribed by a doctor. More recently in 2019, a pharmaceutical was developed by Janssen Pharmaceuticals using esketamine, an active isomer of ketamine, to manufacture a product called Spravato (Drugs.com, 2019). This novel nasal spray using esketamine was approved to treat adults with treatment-resistant depression who are unable to receive other treatments like electroconvulsive therapy or intravenous ketamine (Drugs.com, 2019; Jalloh, 2020). However, in addition to Spravato, ketamine is being utilized in clinics across America, like the Within Center in Austin, Texas, where intramuscular ketamine is administered as psychedelic therapy in conjunction with a *psychedelic guide* (Within Center, 2022).

Cannabis

The research presented above highlights some of the positive outcomes when using psychedelics. However, it is important to consider the risks associated with their use as well. For the sake of simplicity and to support my following argument for drug reform and decriminalization, I find it most important to discuss the unknown risks involved for one popular drug in particular, cannabis. Cannabis has become a culturally accepted in social circles, yet the risks involved are mostly brushed off as remanences of past government propaganda.

The serious nature of chronic cannabis use is illustrated in a recent podcast by Dr. Andrew Huberman, a neuroscientist and tenured professor at the Stanford School of Medicine, where he elaborates on the current literature regarding cannabis use (2022). While Dr. Huberman does not

explicitly say whether or not cannabis use is bad or good, he provides his analysis of the current literature which shows both the positive and negative impacts of using cannabis including increased creativity, altered speech production, and mental health disorders (2022). Above all, the most alarming risk involved in chronic use of cannabis is an increased risk of psychosis (Huberman, 2022; Petrili et al., 2020). In 2020, Petrili et al., published a systemic review of the association of cannabis and mental health in which their research indicated a potential for negative mental health associated with the use of high THC cannabis. Although this study is a systemic review and does not involve clinical patients, it should sound the alarm for future research to be conducted to further understand the effects of cannabis on humans. Unfortunately, the classification of cannabis as a schedule I drug halters research on the substance by limiting its availability and thus further research is heavily restricted. Additionally, this systemic review illustrates the importance of cannabis potency regulation and can be a helpful tool for legislators when creating cannabis-related policy (Petrili et al., 2020). Furthermore, examples of the risks involved in psychedelic use are predominately anecdotal due to the restrictions put on researching scheduled drugs and to better understand these risks, extensive research must be conducted. This research is stifled by outdated drug laws which must be reformed for the sake of public safety.

The Case for Drug Reform and Decriminalization

Literature Review

The purpose of the following section is to examine and synthesize existing research and literature in support of drug reform and decriminalization. To make a strong case for drug reform and decriminalization of psychedelics, it is necessary to make use of a variety of sources

including primary literature, reputable websites, and videos. Due to the vast amount of literature and sources I am drawing from, I will briefly discuss my references by group and how I built my case based on their relevance to the current drug policy landscape.

To start my argument, I found it necessary to discuss the core values of America and the War on Drugs. The founding principles of America, such as liberty and the pursuit of happiness, are in direct contradiction with the sentiments of the War on Drugs. This section will delve into the history of drug prohibition in the United States by examining its roots and consequences. Next, the paper will explore the negative consequences of the War on Drugs, with a primary focus on its impact on public health, the perpetuation of racism, unjust cycles of incarceration, and the stigmatization and fear surrounding illegal drug use. Following this, I will present the case for drug reform and decriminalization, using Portugal as an example of successful drug reform and its implications, if adopted, for public health in the United States. Finally, the paper will discuss the progress of decriminalization and drug reform in the United States by including state and city-level legislation, and the pathway to making psychedelics into medicines as shown by MAPS in their MDMA AT trials with the FDA. By examining these topics and synthesizing my findings below, I aim to present a compelling argument for drug policy reform and the decriminalization of psychedelics.

The Core Values of America and the War on Drugs

America was founded under the values of freedom and classical liberalism (Collins & McCorkle, 2023) and the War on Drugs is the antithesis of this. Although our founding fathers surely could not have imagined the world that we live in today or the problems that their decedents would face, it is important to consider these foundations when looking at our current

drug culture. Freedom is the very thing that America was founded upon and while there are laws put in place to protect these freedoms, the legislation put in place to prevent drug use goes against this. However, if we are entitled to life, liberty, and the pursuit of happiness, then we are entitled to pursuing the happiness and wellness through the use of drugs (Collins & McCorkle, 2023). The differences in which drugs we are allowed to consume as a culture is very biased. For example, one may walk into a liquor store and, if over the age of 21, buy enough alcohol to kill, harm, or cause destruction to themselves or others. While this could still be true for a number of illicit substances, the government places the burden of responsibility for the safe use of alcohol on the consumer and the same responsibility should be given to the users of now illicit drugs. Thus, the placement of unjust laws on recreational drug use is hypocritical and goes against the very foundations that America was built on. If America is to fulfill its guise of freedom for all, this must include the use of all drugs fairly.

Although mentioned above, it is important to briefly explain the War on Drugs and the laws that criminalized psychoactive drug use. The War on Drugs is a term used to describe a series of policies and initiatives that aimed to target rampant drug use and trafficking. In 1970 President Richard Nixon enacted the Controlled Substances Act (CSA), launched the War on Drugs in 1971 declaring drugs to be "public enemy number one," and then created the Drug Enforcement Agency (DEA) in 1973 to wage this war (History Today, 2022). The CSA now categorized psychoactive drugs into categories I-V based on their alleged potential for abuse and known medical benefits. Drugs like LSD, heroin, cannabis, psilocybin, and MDMA were classified as schedule I (DEA Diversion Control Division, 2023) However, drugs like Ketamine scored a schedule III classification due to the lower potential for abuse and known medical benefits. Despite numerous publications on the known benefits of cannabis, MDMA, LSD, and

psilocybin, these drugs still remain schedule I where this drastic classification pushes distribution and use to the black market where users are more likely to obtain adulterated drugs that are inherently more dangerous and produce less desirable effects for the users (Shultz 2014). The CSA and DEA were originally created with the intent to protect Americans, but these initiatives go against the core values of freedom in America and produced problematic unintended consequences that are still plaguing us today.

During the 1980s following the creation of the CSA and DEA, President Ronald Reagan's wife, Nancy Reagan, set out on an anti-drug campaign aimed at discouraging drug use among America's youth. When asked about what to do when offered drugs the First Lady famously replied, "Just Say No" (Schultz, 2014). The oversimplification of this issue that this phrase perpetuated is problematic in that it denies the reality that the youth are going to experiment with drugs. Instead of educating America's youth on safe ways to experiment and teaching them the potential consequences of adolescent drug use, this slogan instilled fear that led to underground and shameful use of the drugs. In addition, the combination of the "Just Say No" campaign and the government crackdown on trafficking and drug use had unintended consequences like creating increasing the black-market demand for psychoactive drugs.

Consequences of the War on Drugs

The War on Drugs and CSA have instituted significant public health consequences for drug users. Experts argue that these policies have perpetuated issues such as increased overdose rates, disproportionate health disparities among people of color, and an increase in diseases associated with intravenous drug use (Nellis, 2021; Tempalski & McQuie, 2009). Nellis argues that the criminalization of drug use and the enforcement of the CSA has disproportionately

impacted communities of color which led to cycles of incarceration and limited access to healthcare and social services (2021). Furthermore, the emphasis on punitive measures over harm reduction strategies correlates with increased rates of HIV and hepatitis C infections among injection drug users in addition to higher rates of overdose fatalities (Tempalski & McQuie, 2009) Although this study done by Tempalski and McQuie was conducted in the early 2000's, it is evident in our current culture that we are still suffering, if not more now, from the opiate crisis perpetuated by the government and Big Pharma. Instead of improving public health, the War on Drugs has contributed to the exacerbation of existing health inequalities and impeded progress in addressing the very real issue of substance use disorders in America (Alexander, 2010). In addition to perpetuating a culture of racism and negative health consequences across America, the War on Drugs creates a detrimental culture of fear and shame surrounding drug use that perpetuates further harm and health issues. The prohibition of drugs is a massive violation of American rights and freedom. By prohibiting the use of drugs and enforcing criminal punishment the DEA and other government enforcers impact users with feelings of shame (Fritz, 2021). I argue that the shame and fear of retributive justice surrounding illegal drug use create negative outcomes that are contradictory to the intentions of the War on Drugs. According to a 2022 study by Davis et al., data suggests that the stigma surrounding illegal drug use has discouraged users from accessing community resources where their drugs could be checked for adulterants. Further research could suggest that this stigmatization is therefore responsible for more accidental overdoses as drugs are increasingly tainted with drugs such as fentanyl. Having access to drug checks is an important resource that could prevent overdoses associated with drug use. Cases like this illustrate that the stigma and fear of criminal consequences gets in the way of safe drug use practices, and it becomes clear the War on Drugs has failed miserably.

The prohibition on drugs gave way to a more robust and dangerous underground drug market that is responsible for numerous negative consequences in America and around the world. America has a free-market economy that is based on the basic mechanism of supply and demand. When the CSA was enacted, the supply of now-illegal drugs was severely limited and the demand for them increased. This opened up ample new economic opportunities for those willing to engage in criminal activities. In addition, the prohibition of drugs also removed the safety regulations in place as pharmaceutical companies were no longer the producer of such substances. I argue that this resulted in the shift of the production and distribution of illegal towards those willing to engage in criminal behavior where there is less regard for human safety and more focus on profitability. This is shown abundantly throughout America in instances where teenagers and young adults are accidentally overdosing on fentanyl at rapid rates (Miroff, 2023). These accidental overdoses can easily be explained by the phenomena of drugs being sold as one substance, but containing other, more harmful substances. In a 2017 study, researchers analyzed data provided by the pill-testing organization, DanceSafe, and showed that only 60% of the 529 tested samples contained either MDMA or MDA (a similar compound) (Saleemi et al., 2017). These tests also indicated the presence of more dangerous substances, or adulterants, such as methylone, cathinone (bath salts), methamphetamine, amphetamine, and cocaine which could lead to more dangerous or lethal events when taken under the assumption that the user was under the possession of MDMA (Saleemi et al., 2017). Regulation, education, and accessible drug testing could easily fix this dangerous problem and decrease the likelihood of adverse or lethal drug-related events.

While some politicians continue to engage in partisan politics where they blame the other party's administration for the nations increasing overdose rates, it is clear this issue stems from

the ineffective and punitive drug policy system that focuses more on punishment than education (Miroff, 2023). Certainly, America has a drug problem. However, the prohibition of drugs is what led to the uptake of criminal activities and the dangers associated with it. At this point in America, supply is corrupt and demand continues to skyrocket. If the government is to engage in this issue appropriately it is vital that they regulate drug use and manufacturing by reforming drug policies toward legalization through decriminalization.

Decriminalization and Drug Reform

To pursue a pathway toward decriminalization and drug reform, it is important to first look at jurisdictions where drugs have been decriminalized to find policies that have been effective. When making a case for the decriminalization of drugs Portugal is often brought into the argument due to its progressive stance on drugs and the duration of its policies. Since 2001, Portugal has been a prime example of the effects of the decriminalization of drug possession and consumption (Sunday Times, 2023). Since that year they have seen a dramatic decrease in drug-related issues such as a five times lower drug-related death rate among EU members, lower rates of HIV infections, and drug use among adolescents (Sunday Times, 2023). Some may argue that this was not a direct result of the drug reform in 2001 (Laqueur, 2015). Rather, it is suggested that this change in the criminal consequences of drug use and possession worked in conjunction with other drug reform policies that helped decrease drug-related issues in Portugal (Laqueur, 2015). Furthermore, this illustrates the need for a broader reform on drug policies that focus less on retributive justice but rather on informed drug education and equitable access to rehabilitation and other healthcare services.

Decriminalization in America is far from non-existent. Although there are no federal drug

policies that have decriminalized the use of drugs in America, there are many states and cities that have supported such reform in their law. In 1996, California became the first state to recognize the potential benefits of cannabis and allowed physicians to recommend its use. Since then, twenty states have legalized the use of cannabis as long as they follow certain regulations and an additional twenty states have decriminalized the possession of small amounts of cannabis (Laqueur, 2015). However, it is important to recognize that although cannabis has been legalized at the state level, this law contradicts federal law as cannabis is still recognized as a schedule I drug. At the state and city level, the decriminalization of certain psychedelics has occurred, but with varying degrees of enforcement on possession and use. For information on which jurisdictions are providing accurate and up-to-date knowledge sites like Psychedelic Alpha can be used reliably due to their connections with law firms and lawmakers that give them the most accurate and up-to-date information on the psychedelic decriminalization status of each state and city (2023). Sites like this allow users to access the data on regulations and determine the level of legality and risk within their given jurisdiction. For example, Texas passed HB1802 in June of 2021 which called for the Department of State Health Services to research the effectiveness of therapies that include the use of MDMA, psilocybin, and ketamine for specific conditions. (Psychedelic Alpha, 2023). This, however, does not give Texas Residents the ability to use these substances legally but sets in motion the proper medical research that could lead to more accessible and safe use. In Oregon, Measures 109 was passed in 2021 and created the Oregon Health Authority that is to regulate the manufacturing and sales of psilocybin products and psilocybin services within the state, creating a preliminary example of how psychedelics may be regulated in the United States (Psychedelic Alpha, 2023). Additionally, Measure 110 was passed in 2021 and reclassified the possession of small amounts of drugs as a civil violation in which a

\$100 fine would be given unless the offender opts in to seek alternative treatment instead (State of Oregon, 2023). Finally, one of the best examples of regulated access to psychedelics is in the state of Colorado. In 2022, voters in Colorado passed Proposition 122 which enacted a regulated access program that will help with the development and regulation of state-sanctioned *Healing Centers* (Psychedelic Alpha, 2023). While this proposition currently only includes the use of psilocybin and psilocyn, it will eventually include other *natural medicines* such as DMT, ibogaine, and mescaline in 2026 as long as the regulatory department establishes the proper education and regulations by 2024 (Psychedelic Alpha, 2023). While there is obviously a movement towards decriminalization and legalization of various psychedelics within certain jurisdictions in the United States, it is still federally illegal, and this precedent must change if people are to have safe, responsible, and equitable access to these substances. Furthermore, these regulations set a prime example for regulated drug use among small populations that may lead to better studies and regulations for when the time comes for national drug reform.

For psychedelics to enter American culture in a regulated and safe way, it is important to look at the process by which a drug becomes a medicine in the United States. Although becoming a medicine is not the decriminalization of the drug itself, it is a pathway that could help people have access to these powerful substances under medical supervision. As mentioned above, Dr. Rick Doblin has been a pioneer in the psychedelic movement since the early days of prohibition. Doblin spent his years after prohibition dedicating his life to changing the government's stance on psychedelics. In 2001, Doblin completed his dissertation titled *Regulation of the Medical use of Psychedelics and Marijuana* which lays out the framework which MAPS has utilized in pursuit of FDA approval for MDMA as a medicine (Doblin, 2001). The process in which an already scheduled drug becomes a medicine is complicated, as shown

by Doblin's 438-page dissertation (Doblin, 2001). It would be much simpler if MDMA and other psychedelics were not already scheduled. However, most psychedelics are scheduled. Therefore, this process would need novel court decisions or legal precedents to support this action. Luckily, Doblin went on a great length throughout his dissertation to prove that there is a legal precedent by illustrating the rescheduling of drugs like GHB and Marinol (Doblin, 2001).

In order to get FDA approval for prescription use as a medicine, researchers need to present the FDA with enough data to approve a large-scale Phase 3 trial in which researchers are required to prove safety and efficacy (Doblin, 2019). After 30 years of research, in 2016, MAPS applied for their first Phase 3 trial with the FDA for the use of MDMA AT. Upon completion of the study and analysis by an independent data monitoring committee, researchers at MAPS demonstrated statistically significant results in their MDMA AT Phase 3 trial completed in 2021 (MAPS, 2022). After proving statistical significance through their study, Doblin and the pathway laid forth through his dissertation, MAPS has completed the necessary minimum requirements to be approved for use as a prescription medicine (Doblin, 2019; MAPS, 2022). However, due to the controversial issue of rescheduling a drug and the resistance they have anticipated upon review, MAPS has continued their research through a second Phase 3 trial with MDMA AT (Aldworth, 2023). This trial has been completed as of January 2023 and similar successful results to the first trial are confirmed and expected to be released later in 2023 (ClinicalTrials.gov, 2023; Aldworth, 2023). As spoken by Rick Doblin in a recent podcast interview, if everything goes according to the plan set forth by him and MAPS, psychedelic-assisted therapy with MDMA will be required by law to be approved by the FDA and sequentially rescheduled by the DEA as soon as 2024, thus ending the 50 years of national drug prohibition set forth by the Nixon administration (Rogan, 2023).

Conclusion

In conclusion, this thesis has highlighted the historical, cultural, and therapeutic significance of psychedelics and emphasized the urgent need for drug law reform and decriminalization. By revisiting the rich history of psychedelic use across various cultures, we can better appreciate the valuable insights and the potential benefits these substances hold for individuals and society as a whole. Since psychedelic research has been restarted, it has begun to reveal their therapeutic potential, demonstrated their efficacy in treating mental health disorders, and put forth a method of integration into mainstream medicine. This research serves as a foundation for dismantling misconceptions and stigma about psychedelic use by building an evidence-based argument for decriminalization and legalization.

The War on Drugs has done more harm than good by perpetuating stigma and limiting access to potentially life-saving treatments. Additionally, the War on Drugs has generated a dangerous underground drug market which increases the risks involved with psychedelics. By examining the current states of decriminalization and legality of psychedelics in the United States and alternative drug laws, we can better understand how to promote responsible use and ensure public safety. The emergence of progressive drug policies in various jurisdictions serves as a beacon of hope and a model for others to follow. The FDA's medical model offers a clear pathway for legalizing these substances, and the progress made by various organizations like MAPS is a testament to the growing recognition of their value in our world. This progress indicates that we are on the cusp of a great paradigm shift in our understanding and acceptance of psychedelics as medicine.

As our culture moves toward a more educated approach to drug policy, it is crucial that

we continue to advocate for decriminalization and the safe, responsible use of psychedelics. By educating on the history and sharing evidence-based research, we can break down barriers and destigmatize these substances. By doing so, we help create a society that embraces the healing potential of these ancient substances and hardness their power to improve human well-being. This thesis has aimed to contribute to this much needed conversation, and it is my hope that it will inspire further research, discourse, and exploration in the psychedelic frontier. May the insights and arguments presented in this thesis serve as a reminder of our past and a catalyst for continued progress in the realms of public safety, scientific research, and the social acceptance of psychedelics.

References

- A multi-site phase 3 study of MDMA-Assisted psychotherapy for PTSD (MAPP2) Full Text

 View. Full Text View ClinicalTrials.gov. (2023, January). Retrieved April 4, 2023, from https://clinicaltrials.gov/ct2/show/NCT04077437
- Aldworth, B. (2023, January 7). Prior positive results confirmed in maps-sponsored,

 philanthropy-funded phase 3 trial multidisciplinary association for psychedelic studies.

 MAPS. Retrieved April 4, 2023, from https://maps.org/2023/01/05/prior-positive-results-confirmed/
- Alexander, M. (2012). The new Jim CrowFritz: mass incarceration in the age of colorblindness (Revised edition / with a new foreword by Cornel West.). New Press.
- Lists of: Scheduling Actions Controlled Substances Regulated Chemicals. Controlled substance schedules. (2023, April). Retrieved April 21, 2023, from https://www.deadiversion.usdoj.gov/schedules/
- Costandi, M. (2014). A brief history of psychedelic psychiatry. *The Psychologist*, 27(9), 714–715.
- CASTRO-KLARÉN, S. (2021). Chavín: How Do We Understand Thee? An Inquiry into the Jaguar and the San Pedro Cactus. *Revista de Estudios Hispánicos*, *55*(3), 515–535. https://doi-org.libproxy.txstate.edu/10.1353/rvs.2021.0041
- Doblin, R. E. (2001). Regulation of the medical use of psychedelics and marijuana [ProQuest Information & Learning]. In *Dissertation Abstracts International Section A: Humanities and Social Sciences* (Vol. 62, Issue 4–A, p. 1579).
- Drug addiction treatment and recovery act (measure 110). Oregon Health Authority: Drug

 Addiction Treatment and Recovery Act (Measure 110): Behavioral Health Services:

- State of Oregon. (n.d.). Retrieved April 4, 2023, from https://www.oregon.gov/oha/HSD/AMH/Pages/Measure110.aspx
- FDA approves Spravato (Esketamine) nasal spray for treatment-resistant depression.

 Drugs.com. (2019). Retrieved April 14, 2023, from

 https://www.drugs.com/newdrugs/fda-approves-spravato-esketamine-nasal-resistant-depression-4926.html
- Fritz, K. G. (2021). The Importance of Rights to the Argument for the Decriminalization of Drugs. *American Journal of Bioethics*, 21(4), 46–48.
- Gasser, P., Holstein, D., Michel, Y., Doblin, R., Yazar-Klosinski, B., Passie, T., & Brenneisen, R. (2014). Safety and Efficacy of Lysergic Acid Diethylamide-Assisted Psychotherapy for Anxiety Associated With Life-threatening Diseases. *JOURNAL OF NERVOUS AND MENTAL DISEASE*, 202(7), 513–520. https://doi-org.libproxy.txstate.edu/10.1097/NMD.000000000000113
- Hagenbach, D., Werthmüller, L., & Grof, S. (2018). *Mystic Chemist. [electronic resource]: The Life of Albert Hofmann and His Discovery of LSD.* Synergetic Press.
- Interim analysis shows at least 90% chance of statistically significant difference in PTSD symptoms after MDMA-assisted therapy multidisciplinary association for psychedelic studies.
- Jalloh, M. (2020). Esketamine (Spravato) for Treatment-Resistant Depression. *American Family Physician*, 101(6), 339–340.
- MAPS. (2022, April 28). Retrieved April 4, 2023, from https://maps.org/news/media/press-release-interim-analysis-shows-at-least-90-chance-of-statistically-significant-difference-in-ptsd-symptoms-after-mdma-assisted-psychotherapy/

- Laqueur, H. (2015). Uses and Abuses of Drug Decriminalization in Portugal. *Law & Social Inquiry*, 40(3), 746–781.
- Miroff, N. (2023, March 29). Fentanyl is "single greatest challenge" U.S. faces, DHS secretary says. *The Washington Post*.
- Petrilli, K., Ofori, S., Hines, L., Taylor, G., Adams, S., & Freeman, T. P. (2022). Association of cannabis potency with mental ill health and addiction: a systematic review. *The Lancet Psychiatry*, 9(9), 736–750. https://doi-org.libproxy.txstate.edu/10.1016/S2215-0366(22)00161-4
- Psychedelics Legalization & Decriminalization tracker. Psychedelic Alpha. (n.d.). Retrieved March 31, 2023, from https://psychedelicalpha.com/data/psychedelic-laws
- Rogan, J. (Host). (2023, March 31). #1964 Rick Doblin (no. 1964) [Video podcast episode]. In

 The Joe Rogan Experience. Spotify.

 https://open.spotify.com/episode/1EMSI2KxCHhbyEwCBnIfsw
- Huberman, A. (Host). (2022, October). The Effects of Cannabis (Marijuana) on the Brain and Body (no. 92) [Audio podcast episode]. In The Huberman Lab. Spotify.
- Samantha Davis, Bruce Wallace, Thea Van Roode, & Dennis Hore. (2022). Substance Use Stigma and Community Drug Checking: A Qualitative Study Examining Barriers and Possible Responses. *International Journal of Environmental Research and Public Health*, 19(15978), 15978.
- Saleemi, S., Pennybaker, S. J., Wooldridge, M., & Johnson, M. W. (2017). Who is "Molly"? MDMA adulterants by product name and the impact of harm-reduction services at raves." *JOURNAL OF PSYCHOPHARMACOLOGY*, *31*(8), 1056–1060. https://doiorg.libproxy.txstate.edu/10.1177/0269881117715596

- Our research multidisciplinary association for psychedelic studies. MAPS. (2023, January 10).

 Retrieved April 18, 2023, from https://maps.org/our-research/
- Schultes, R. E., & Hofmann, A. (1992). *Plants of the gods: their sacred, healing, and hallucinogenic powers*. Healing Arts Press.
- Shulgin, A., & Shulgin, A. (1997). *PIHKAL: A Chemical Love Story*. Berkely, CA: Transform Press
- Shulgin, A., & Shulgin, A. (1997). TIHKAL: the continuation. Transform.
- Strassman, R. (2001). *DMT*: the spirit molecule: a doctor's revolutionary research into the biology of near-death and mystical experiences. Park Street Press.
- Strassman, R. (2022). The Psychedelic Handbook: A Practical Guide to Psilocybin, LSD, Ketamine, MDMA, and Ayahuasca. Ulysses Press.
- Tempalski, B., & McQuie, H. (2009). Drugscapes and the role of place and space in injection drug use-related HIV risk environments. *International Journal of Drug Policy*, 20(1), 4–13
- The R. gordon wasson trip that changed everything. Fantastic Fungi. (2023, March 8). Retrieved April 14, 2023, from https://fantasticfungi.com/the-r-gordon-wasson-trip-that-changed-everything/
- War on drugs won't be won until they are legal; Drug-related deaths have dropped in Portugal since decriminalisation. (2023, March 5). *Sunday Times (London, England)*, 14.
- Wasson, G. (1957). Seeking the Magic Mushroom. *Life*, 42(19), 100–120.
- Within center: Ketamine FAQ: Austin, TX. Within Center | Ketamine Therapy | Austin. (2022, November 29). Retrieved April 14, 2023, from https://within.center/what-is-ketamine-faq/

YouTube. (2019, August 9). The future of psychedelic-assisted psychotherapy | Rick Doblin.

YouTube. Retrieved April 4, 2023, from https://www.youtube.com/watch?v=Q9XD8yRPxc8