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Psychedelics Deserve Recognition

Imagine this: you are settled in bed and gradually drifting off to sleep when suddenly you are transported to a world filled with your worst nightmares. Being accosted by violent soldiers, bullets raining down around you, no one to help you as you drown in your fear. There is no escape, that is, until you burst back into reality, shooting up in bed while drenched in a cold sweat, your heart beating wildly out of your chest. For many people, nightmares such as this can be a rare occurrence, whereas most people do not experience dreams to this extent at all. Those who do endure these intense, incredibly vivid and often alarming dreams may often feel as if there is no way out, and they have to live through these experiences again and again. This was the case for army veteran Scott Ostrom. Upon returning home after his deployment in Iraq, these nightmares plagued him deeply for many years and they became so paralyzing that the effects began to bleed into other areas of his life where, unlike in the dream-state, the consequences were all too real. After being formally diagnosed as having PTSD, Ostrom began to suffer from panic attacks and, due to this, he was forced to drop out of college (Nuwer). In an interview for *The New York Times*, reporter Rachel Nuwer explains the harmful effects from Ostrom's dreams in his everyday life, detailing how, “He pushed his friends and family away and got into an unhealthy romantic relationship,” which then translated to being condemned by an assault charge and spurred a suicide attempt. Despite efforts to combat his mental health struggles, traditional therapies and medication did not provide any relief (Nuwer). It was not until Ostrom participated

in a medical trial that incorporated psychedelic substances with therapy that he finally began to relieve his mental pain. While the word "psychedelic" carries negative connotations for a great number of people, for individuals like Ostrom, who was brought to a breaking point of desperation, it is of little consequence as to what methods can be implemented in order to spur emotional and mental healing. Although years and years of research has been conducted on the effects of psychedelics in the brain, specifically how these substances improve mental disorders, these drugs are still deemed as detrimental to one's health and continue to be viewed with judgment; however, the garnered benefits of the use of psychedelics as a mental health treatment cannot be denied, thus proving that psychedelic substances deserve a position in medical world.

Due to the political and social limitations (meaning judgments) surrounding the use of psychedelic substances, the majority of people know little to nothing about where exactly psychedelics originated from or their role in medical history. Many assume that these drugs are more modern, man-made substances that are obviously harmful to one's health when, in fact, psychedelics have been utilized safely among numerous ancient cultures including the Aztecs, ancient Greeks, and Native Americans (Nichols). Dr. David E. Nichols from the University of North Carolina School of Pharmacy even strongly declares that "psychedelics may be the oldest class of psychopharmacological agents known to man." In more recent history (the 1950s), psychedelics were placed in the limelight once more by psychiatrist Humphry Osmond. Osmond, along with colleague John Smythies, hypothesized that some mental illnesses (they primarily investigated schizophrenia) were caused by an imbalance in the brain and used this knowledge to become one of the first mental health professionals to spearhead the use of LSD to treat

alcoholism and other mental disorders (Costandi). Indeed, it was Osmond himself that conceived the term psychedelic, translating to "mind manifesting" (Costnadi). In his article, "Looking Back: A Brief History of Psychedelic Psychiatry," neuroscientist Moheb Costandi notes that, as Osmond's research continued, and with the aid of fellow psychiatrist Albert Hoffer, that, "Osmond conducted experiments on himself with LSD and concluded that the drug could produce profound changes in consciousness," thus implicating that the properties of LSD could be quite lucrative in the treatment of mental disorders. Overall, it was concluded from these findings that LSD would be an ideal tool to use in psychotherapy to give patients a new sense of self-awareness that would ultimately lead to an immense improvement in mental health struggles. Osmond's exciting discoveries put into action a chain of new research completed by professionals throughout the world, each study producing astounding improvements in patients upon trials using LSD as a treatment for disorders such as alcoholism, depression, and anxiety (Costandi). Psychiatrists and professionals from around the globe continually found a similar result in their trials; that the use of hallucinogens (psychedelics) therapeutically provided patients with a fresh perspective on their conditions and life itself. However, despite the extensive and overwhelmingly positive examinations completed on the usage of psychedelics in therapy, research came to an unexpected halt as a result of adamant pushback by the government, which created more opposition against the utilization of these substances, even medically.

Although psychedelic-assisted therapy quickly exploded into a widespread and promising phenomenon that was strongly supported by scientific evidence, there continued to be strong resistance to allowing these therapies a place in mainstream society. One halting force being the federal government. The analysis "Ethical and Legal Issues in Psychedelic Harm Reduction and

Integration Therapy," completed by psychotherapists Brian Pilecki et al., discusses the eventual demise of psychedelic research in the US noting that although (during the 1950s and 1960s) scientists and medical professionals worked tirelessly to understand the probable benefits of psychedelics when used alongside therapy, as these substances became more popularized recreational usage was spiking, therefore causing the US federal government to intervene with a harsh hand (3). In 1970, as a result of this intervention, Pilecki et al. state that,"the USA placed psychedelics in Schedule I of the Controlled Substances Act, deeming them to have no medical value, and this prohibition spread internationally which rapidly halted psychedelic research" (3). Though many professionals argue against the political restraints placed on psychedelic usage, some recognize that there are many risks that must be considered due to its progressive reemergence into mainstream society. Authors Pilecki et al. recognize the influx of psychedelic treatments being harnessed therapeutically, but assert that there are ethical and legal issues that must be considered both as clients and mental health professionals. While the presence of psychedelics as therapy techniques are becoming widespread, the legal constraints on these controlled substances can result in individuals choosing to use them on their own rather than waiting for legal medical access, instead making the choice to purchase these substances from "underground" providers, which involves many risks that could ultimately result in harmful, unsafe experiences (Pilecki et al. 5). Acknowledging these risk factors, the analysis explains an instance in which substances of "questionable quality" may cause an alarming reaction, describing how individuals may choose to partake in these drugs with friends at an event in which, "there is likely little control over environmental variables such as weather, crowds, or even having a place to sit. There may be increased anxiety about engaging in an illegal activity

and no trained individuals to assist in case of difficulty," thus resulting in a "bad trip" (Pilecki et al. 4). Dr. Charles S. Grob, a psychiatry professor in the school of medicine at UCLA, reiterates this risk, stressing how the psychedelic revolution will likely increase recreational use, leading to problematic adverse reactions (Jacobs). Due to these potential risks, it is noted how incredibly imperative it is that mental health professionals be thoroughly educated about how to safely administer psychedelic therapies and to ensure that their clients have adequate support post-treatment in a safe space in which they may work through any negative emotions that may arise from treatment. While considering the possible harmful outcomes a patient may experience upon attempting psychedelic-assisted therapy, it is equally (if not more) important to contemplate the fact that the positive reactions from these therapies far outweigh the negative.

There are numerous rumors and myths that surround psychedelic substances; narratives claiming that they are addictive and cause lasting, irreversible health and mental defects when, in actuality, they spur the exact opposite effects. Disregarding the belief that psychedelic drugs are detrimental to one's health, a myriad of studies prove that the substances are influential to stark improvements in mental health problems, notably lacking in harmful effects. Reporter Rachel Nuwer in her article, "A Psychedelic Drug Passes a Big Test for PTSD Treatment," discusses the effects of MDMA therapy and debunks these false connotations implicating that psychedelics are damaging. Nuwer insists that, with input from Dr. Rick Doblin (the director of the Multidisciplinary Association for Psychedelic Studies) to support her claims, MDMA (Ecstasy) does not "eat" holes in the brain and does not cause any harm neurobiologically. In fact, Nuwer notes, "Research in animals and humans confirms that MDMA produces no neurotoxic effects at

the doses administered in clinical trials." Moreover, the same can be said about other psychedelic substances. In regards to addiction, psychedelics have markedly low addictive properties and, in contrast, may be utilized to combat addictive personalities. Ketamine (an anesthetic traditionally used for veterinary surgeries) for example, is evidenced to exponentially decrease addictive behaviors related to alcohol and, according to mental health counselors Russ Curtis et al. in their article "The Role of Psychedelics and Counseling in Mental Health Treatment," "There is also evidence that ketamine significantly improves abstinence from cocaine and heroin" (327). In addition, studies focused on psilocybin (otherwise known as "magic mushrooms") have shown that administration along with motivational enhancement therapy greatly decreased alcohol cravings (Curtis et al. 329). Additionally, it is noteworthy that psilocybin in particular (as articulated by Curtis et al.) "has low abuse liability, due to only short-term increases in tolerance, lack of reward system activation, and absence of craving" (330). Furthermore, reporter for *The New York Times* Andrew Jacobs, brings attention to how various studies prove that "classic psychedelics like LSD and psilocybin are not addictive and cause no organ damage in even high doses." Jacobs also makes a point to express that, contrary to the opposing beliefs, a "bad trip" does not induce chromosome damage. As seen, it is apparent that there are very little to no common adverse effects in reaction to psychedelic-assisted therapies, indicating the high level of distinction these substances have over traditional, ineffective pharmaceuticals.

In comparison to conventional pharmaceuticals, psychedelic drugs do not simply dull the symptoms of mental disorders, but rather take the treatment further by allowing the brain to process negative emotions and thoughts, promoting an awareness to heal itself. Classic psychedelics are far more effective and beneficial to the treatment of mental health issues in

countless ways, each substance offering some form of healing properties. The substance ketamine for example, has been shown to be a promising treatment for depression, fighting against common symptoms by producing antidepressant effects. Experienced mental health counselors Russ Curtis et al. explain the ways in which ketamine affects the brain's neuroplasticity, thus "rebooting" the brain, causing heightened self-awareness as well as creating an improved outlook on life (326). In regards to the emotive experiences ketamine produces, Curtis et al. state that, "Depending on the dose, ketamine is reported to produce feelings of warmth, happiness, empathy, and ego dissolution, where one feels free of fear and sadness," promoting the effectiveness of the drug (326). Similarly, MDMA therapy greatly alters the recollection of traumatic experiences that are common with a PTSD diagnosis, minimizing dramatic anxiety symptoms and feelings of dissociation (Curtis et al. 327). Interestingly, MDMA increases serotonin release at the neurobiological level as well; serotonin being a mood stabilizing neurotransmitter that is drastically lacking in the brain of individuals suffering from depression (Perkins et al. 1131). Additionally, psilocybin (mushrooms) presents strongly evidenced positive effects in treating treatment-resistant depression, which is a mental disorder that does not respond to traditional pharmaceutical and therapy treatments. Due to psilocybin's researched and proven safety (it arguably being the safest of classical psychedelic drugs, producing very little side effects), the FDA designated the substance as a "breakthrough therapy" in the treatment of depression and suicidal ideation (Curtis et al. 329). In fact, Curtis et al. declare that, "Furthermore, psilocybin produced more significant decreases in the suicidal ideation when compared to other psychedelics, suggesting its therapeutic potential as a 'suicide prophylaxis,'" which is quite the distinguishing quality due to the severity of suicidal thinking

(330). Regarding the outcomes of psilocybin treatment, perhaps some of the most beneficial effects were in patients with a severe cancer diagnosis suffering from depression. Importantly, a study listed by Curtis et al. found that, after 6 months post-administration, 80% of patients had an improved mood and "increased measures of quality of life" (329). Along with the listed distinctions of common psychedelic treatment improvements, Table 1 created by mental health researcher Daniel Perkins et al. presents studies detailing the numerous positive outcomes of psychedelic-assisted therapies. Among the various research studies previously discussed, there have been multiple astounding studies that have made huge strides in the legalization and acceptance of the use of psychedelics in therapy.

Table 1. Recent meta-analyses and systematic reviews of psychedelic substances.

Authors	Type	Studies	Outcome	Psychedelic	Result and effect size	AEs
Galvão et al. (2021)	SR and MA	12	Positive and negative mood and depressive symptoms	Psilocybin, ayahuasca, LSD	Acute and enduring reductions in negative mood and depressive symptoms with moderate-large effects sizes: Acute (3 hours–1 day): 0.50**; Long-term (16–60 days): 0.84**	Nil serious
Romeo et al. (2020)	MA	8	Depressive symptoms	Psilocybin, ayahuasca, LSD	Rapid decrease in depressive symptoms from day 1 (−1.4**) to 6 months (−1.07***)	Nil serious AEs; anxiety, nausea, headaches noted
Luoma et al. (2020)	MA	9	PTSD, anxiety, depression, social anxiety	Psilocybin, ayahuasca, LSD, MDMA	Support for efficacy in four conditions investigated (1.21*** at study primary endpoint)	Nil serious
Dos Santos et al. (2018)	SR of SR/MAs	10	Efficacy, tolerability and safety for mood, anxiety and substance use	Psilocybin, ayahuasca, LSD, DMT	Low-moderate/high evidence of anxiolytic, antidepressive and anti-addictive effects	Nil serious; transient anxiety, dysphoria, psychotic-like features noted
Aday et al. (2020)	SR	34	Long-term effects	Psilocybin, ayahuasca, LSD	Evidence of enduring positive change in personality/attitudes, depression, affect/mood, anxiety, substance use	Nil serious; transient anxiety, headaches, nausea noted
Reiff et al. (2020)	ER	14	Efficacy for the treatment of psychiatric conditions	Psilocybin, ayahuasca, LSD	Initial evidence of efficacy for MDMA/psilocybin. Preliminary but promising research for ayahuasca/LSD	Low potential for abuse, although may be higher for MDMA
Breeksema et al. (2020)	SR	15	Thematic analysis of patient experiences in the treatment of psychiatric disorders	Psilocybin, LSD, ibogaine, ayahuasca, ketamine, MDMA	Subjects report clinically and personally meaningful outcomes beyond symptom reduction. Decreases in craving and withdrawal symptoms in SUD studies	Some acute difficult experiences

MA: meta-analysis; SR: systematic review; ER: evidence review; LSD: lysergic acid diethylamide; AEs: adverse events; PTSD: post-traumatic stress disorder; MDMA: 3,4-methylenedioxymethamphetamine; DMT: *N*,*N*-dimethyltryptamine; SUD: substance use disorder.
***$p < 0.001$; **$p < 0.01$.

Table 1: Systematic Reviews of Psychedelic Substances (Perkins et al.)

Though it will take time and patience in order for psychedelic-assisted therapy to be recognized as a valid form of mental health treatment, there have been groundbreaking studies completed that have shown the hugely promising results garnered from these therapies. Perhaps the most sensational study being a trial in 2021 set forth by the Multidisciplinary Association for Psychedelic Studies (MAPS) that has revolutionized treating post-traumatic stress disorder (PTSD). According to reporter Rachel Nuwer, 90 people of various psychological backgrounds including combat veterans, victims of sexual assault, victims of domestic violence, etc. took part in the experiment and the results showed that, of the two groupings, the participants that received MDMA along with therapy after only two months post-treatment, 67% of those who were not in the placebo group were no longer eligible for a PTSD diagnosis. This Phase 3 trial was monumental in the psychiatric world and the findings were so thrilling that many professionals (after one other Phase 3 trial) predict that the FDA could approve MDMA as a valid treatment for PTSD by 2023 (Nuwer). Arguably the most exciting aspect of this discovery is how MDMA interacts with the brain. While also increasing levels of oxytocin and dopamine, MDMA has the ability, Nuwer explains, to "reopen what neuroscientists refer to as a 'critical period,' the window during childhood when the brain has the superior ability to make new memories and store them." Due to this ability, MDMA allows patients to experience their trauma while also providing them the opportunity to process these experiences in a more effective way. Participant Nathan McGee sets an example of the beneficial effects of the therapy, describing his intense anger and traumatic childhood, but upon MDMA administration he has finally been able to move forward in life, unburdened by emotional pain (Nuwer). In an interview with Nuwer, Mr. McGee details how, "This [MDMA] allowed me to accept myself and recognize who I am." Studies such

as this prove how life-changing psychedelic-assisted therapy can be for many individuals while also broadcasting how the use of psychedelic substances in therapy have persisted despite criminalization.

Although psychedelic research was originally halted and banned by the Drug Enforcement Administration, many medical professionals continued to fight for the use of psychedelics as a form of therapy. Among these professionals, psychedelic researcher and head of the MAPS organization Dr. Rick Doblin has been on a persistent mission to aid the reemergence of medical psychedelic use in the country and is convinced that mainstream society will accept the substances once more. Upon completion of Doblin's Phase 3 trial on the medical improvements garnered from the use of MDMA in therapy, more support for psychedelic research than ever before has arisen and there are implications that, after years of criminalization, Doblin's dreams may become reality. In his article "The Psychedelic Revolution Is Coming. Psychiatry May Never Be the Same," reporter Andrew Jacobs observes that, as a result of Doblin's battle for the legalization of psychedelic substances, universities and research centers are buzzing in a rush of support, drawing in a multitude of investors to fund these studies. Jacobs notes that, "Psychedelics are suddenly awash with money," and that Dr. Doblin is now swimming in funding, which was next to impossible in the past. This influx of investors is likely due to changes in politics, one change being the legalization of recreational marijuana, which implicates that psychedelics could follow suit (Jacobs). Not only this, but even unlikely politicians have been voicing their support. Surprisingly, Republican and former Texas governor Rick Perry fought for a study to be completed on the use of psilocybin in the treatment of PTSD,

claiming that war veterans require the country's aid (Jacobs). Though there is a vast amount of support regarding the placement of psychedelic-assisted therapy in the medical world, some professionals warn that the commercialization of these substances may prove problematic due to how recreational use may spike, which may result in unfortunate psychotic reactions, thus causing public retaliation once more (Jacobs). While this opposition and caution must be recognized, these findings and pushes for legalization are an impressive leap forward towards the acceptance of psychedelic-assisted therapy.

Though there has been a large amount of extensive and positive research completed on the issue of psychedelic drug usage, it should be noted that more research is necessary before fully implementing psychedelic-assisted therapy in society. It has been mentioned that the excitement created from the therapeutic psychedelic discoveries could cause issues regarding health and problems with legality, however, I believe that these discoveries do warrant some excitement and that if solid safety parameters are set, psychedelic therapy could propel treatment-resistant mental health treatments greatly and provide a monumental amount of people relief from their struggles. The ethical issues should be regarded, but if therapists and other mental health professionals were to set up some sort of training program to learn the proper ways in which to treat clients with these therapies, the amount of safety in these clinical situations would increase (Pilecki et al.). Professor of psychiatry at UCLA Dr. Charles S. Grob supports this measure by stating, "What is needed are rigorous protocols and a system to train and credential psychedelic medicine professionals" (Jacobs). It should also be a requirement that patients be educated fully on both the negative and positive effects that could occur in these situations and it should be disclosed whether or not they have used these substances before

recreationally in order for the professional to be aware of any adverse reactions that have occurred for clients in the past (Pilecki et al.). Overall, safety is an imperative aspect of these therapies and will determine whether or not psychedelic-assisted treatments will be accepted by the federal government and society.

There are various opposing points to be made regarding this issue, including the possible commercialization and resulting harmful reactions due to recreational availability of these substances as well as ethicality concerns and social judgments. These opinions in turn tarnish the many positive viewpoints on the problem, dulling what strides have been accomplished by psychiatrists and medical professionals as well as invalidating individuals who choose to try psychedelic-assisted therapies to finally find a speck of relief. As the use of therapeutic psychedelics become more popularized (which is inevitable), there will be some forms of public backlash, most likely pulling the focus to possible harmful reactions and outcomes of these therapies as well as falling back to the traditional judgments that surround the word "psychedelic." However, despite any prejudice against psychedelic substances, it is crucial to recognize how drastically they have revolutionized mental health treatment and have quite literally changed an insurmountable amount of people's lives for the better.

Works Cited

Costandi, Moheb. “Looking Back: A Brief History of Psychedelic Psychiatry.” *The British Psychological Society*, The British Psychological Society, 18 Sept. 2014, https://www.bps.org.uk/psychologist/looking-back-brief-history-psychedelic-psychiatry.

Curtis, Russ, et al. “The Role of Psychedelics and Counseling in Mental Health Treatment.” *Journal of Mental Health Counseling*, vol. 42, no. 4, Oct. 2020, pp. 323–338., https://doi.org/10.17744/mehc.42.4.03.

Jacobs, Andrew. “The Psychedelic Revolution Is Coming. Psychiatry May Never Be the Same.” *The New York Times*, The New York Times, 9 May 2021, https://www.nytimes.com/2021/05/09/health/psychedelics-mdma-psilocybin-molly-mental-health.html?action=click&module=RelatedLinks&pgtype=Article.

Nichols, David E. “Psychedelics.” *Pharmacological Reviews*, vol. 68, no. 2, Apr. 2016, pp. 264–355., https://doi.org/10.1124/pr.115.011478.

Nuwer, Rachel. “A Psychedelic Drug Passes a Big Test for PTSD Treatment.” *The New York Times*, The New York Times, 3 May 2021, https://www.nytimes.com/2021/05/03/health/mdma-approval.html?action=click&module=RelatedLinks&pgtype=Article.

Perkins, Daniel, et al. “Medicinal Psychedelics for Mental Health and Addiction: Advancing Research of an Emerging Paradigm.” *Australian & New Zealand Journal of Psychiatry*, vol. 55, no. 12, 21 Dec. 2021, pp. 1127–1133., https://doi.org/10.1177/0004867421998785.

Pilecki, Brian, et al. “Ethical and Legal Issues in Psychedelic Harm Reduction and Integration Therapy.” *Harm Reduction Journal*, vol. 18, no. 1, 7 Apr. 2021, https://doi.org/10.1186/s12954-021-00489-1.