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Abstract

The counterculture through the 1960s created a fearful impression around psychedelics, which classified them as Schedule I Drugs and effectively banned their uses in the United States. However, the banning of such drugs was less scientific evidence but more media exaggeration and political forces within the U.S. government in the 1960s and 70s. Through analyzing peer-reviewed articles and tertiary sources, psychedelic research and its positive conclusions show how psychedelic-assisted therapy provides effective treatment for symptoms of depression and anxiety, and how psychedelics are beneficial to public health. Additionally, this paper notes that the legalization should not be entirely legal but restricted to clinical settings before additional research can be conducted to ensure proper safety. Because of this, people should support the legalization of psychedelics and regard psychedelics as a helpful tool rather than an addictive, hallucination-inducing, harmful drug.

There are several ways to treat mental health issues: mindfulness, taking pills, or even subjecting a person to psychotherapy. College students are often in stressful situations which take a significant toll on the student's mental health, and the need to choose the correct type of mental health treatment can also add to unwanted stressors such as frustration and anxiety. Psychedelics have come charging into the mental health field with positive research on how certain psychedelics can heal mental health patients and improve healthy individuals. Unfortunately, the United States has banned the usage of psychedelics and research, where few are allowed to evaluate such drugs under strict regulations. The stringent control and banning of psychedelics hinder positive research from providing more transparency on the pros and cons of their uses. Therefore, the U.S. government should legalize certain psychedelics to authorize extensive research, obtain the drug's benefits through medical usage and allow their use within safe clinical settings.

The banning of psychedelics in 1971 caused research to slow following tight regulations, hindering positive research, and making it difficult to draw meaningful conclusions for the proper use of psychedelics. Before the prohibition, psychedelics were used throughout history, serving in ceremonies, rituals, churches, and as healing remedies (Nichols, 2016). For example, peyote (Lophophora williamsii) was available more than 5700 years ago (Bruhn et al., 2002); Aztec Shamans administered psilocybin for healing and religious rituals, and ayahuasca was used by natives and continues its uses to this day in the United States under the Religious Freedom Restoration Act.

Continuing to the 1960s, the use of Lysergic acid diethylamide (LSD), a synthesized hallucinogen discovered in 1938 (Fuentes et al., 2020), and marijuana increased during the Vietnam War, much to the dismay of governing bodies from the state to the federal level. A

quote by American pharmacologist David Nichols summarizes the view of psychedelics during the 60s, stating that "Antiwar attitudes and rejection of conventional social norms by adolescents and college students were often perceived by the mainstream culture to be a consequence of drug use; hence, these substances were often believed to be 'perverting' the minds of our youth" (Nichols, 2016). The social culture in the sixties was convinced that psychedelics were a root cause of negative consequences and generalized them as harmful to society. To fuel the fire, infamous Harvard professor Timothy Leary encouraged young people to "Turn on, tune in, and drop out" (Belouin & Henningfield, 2018). The statement then caused mainstream media to exaggerate stories (Nichols, 2016), such as LSD causing damage to chromosomes and LSD causing people to stare at the sun for hours to go blind. The New Jersey Narcotic Drug Study Commission also called LSD "the greatest threat facing the country today" (Goode, 2008). Yes, the drug could have induced adverse effects on people, but the media significantly inflated the harmfulness of such drugs and pressured the federal government to act on the issue. Unfortunately, the media did not tell the entire story. Many studies in the sixties showed positive effects and use of LSD, and patients showed improvement in alcoholism and minor personality disorders (DiPaolo, 2018). Eventually, laws were passed, and psychedelics were termed Schedule 1 drugs in the Controlled Substances Act of 1970 (Belouin & Henningfield, 2018).

Because of this restriction, research on psychedelics is extremely limited and science on psychedelics would progress much further without the strict rules on psychedelic research. Currently, college students have no sure-fire way to treat mental health symptoms such as depression and anxiety. Online websites, such as a student care medical service *TimelyMD*, advise talking to a professional, getting enough sleep, and even to avoid drugs and alcohol to minimize substance abuse (Stewart, 2020). Unfortunately, most of these solutions are for

reducing the development of depression, not to cure it. In an interview from Harvard Law Today, the general manager of the research group Numinous Inc, Sharan Sidhu, talks about the psychedelic regulations on academic research. He says: "Here in Canada, the regulation you have to go through to do research on psychedelic compounds is quite extensive, as it is in the U.S." Academic researchers also need to acquire materials from regulated facilities, which can be a lengthy process. "If we had more primary research done, where there were more inquiries that were being reviewed by academia, we'd probably be further ahead" (Milano, 2021). It is also extremely hard for researchers to get permission and sustain research on schedule I drugs. According to the New York Times, "To engage in research in Schedule I drugs, scientists must gain permission from the Drug Enforcement Administration. To obtain a license, research labs must have inspections to prove that they can store the drugs and protecting them from misuse. In Britain, the added costs of licensing and security can cost a lab about £5,000 a year, or nearly \$6,500. Unfortunately, the costs in the United States are not as well documented" (Carroll, 2017). Such restrictions limit scientific research on psychedelics, but the prohibition did not stop scientists from trying. Research is still being reviewed and published, and many professionals consider psychedelics a tool for medical use in a clinical setting.

Psychedelics such as psilocybin and LSD have shown to be major advancements in assisting psychotherapy to treat mental health disorders. Suppose a college student is diagnosed with a mental health disorder. In that case, they may be prescribed medication to treat such disorders, like antidepressants to treat depression, which is prevalent for more than 40% of college students, according to the American College Health Association's National College Health Assessment in 2011. To be prescribed antidepressants may take weeks or months, they may not work, and students will have to restart the process to find a remedy (Informed Health,

2020). If medication does not work, then psychotherapy may. Therapy may seem like the last line of a solution, but it is the last line for a reason. With psychedelics aiding psychotherapy, studies show treatment may be much more effective. Psychedelic-assisted therapy provides effective treatment for significant symptoms of depression and anxiety, and research on psychedelics gives evidence of improving conditions by using these drugs such as LSD and psilocybin. The research is so persuasive that some states, such as Oregon, have begun allowing certain psychedelics in clinical settings (Naftulin, 2020). Plenty of research provides reasons for the legalization.

Psilocybin is a psychedelic that produces positive results in treating symptoms of depression, a potential medication alternative working in conjunction with psychotherapy. Psilocybin is a naturally occurring psychedelic mushroom found in North and South America regions (Anderson, 2014). While antidepressants are usually taken every day and require a lengthy process to address symptoms (Belouin & Henningfield, 2018), a single therapeutic session with the aid of psilocybin improved patients with severe anxiety and depression for a length of more than one year (Carhart-Harris et al., 2017). Additionally, a double-blind study conducted at Johns Hopkins University found that psilocybin decreases depression and anxiety in life-threatening cancer patients with sustained effects crossing the 6-month mark. Self-rated measures showed large decreases in depressed mood and death anxiety and increases in quality of life and optimism (Griffiths et al., 2016). This is not a one-off result, as another study run by New York University using psilocybin to treat cancer patients found the drug provided "immediate, substantial, and sustained (up to 7 weeks post-dosing) clinical benefits in terms of reduction of anxiety and depression symptoms" (Ross et al., 2016). Moreover, psilocybin also provides antidepressant effects for patients with major depressive disorder (MDD). A study

aimed at treating patients with MDD provided evidence that psilocybin provided positive results, including the "substantial rapid and enduring antidepressant effects of psilocybin-assisted therapy among patients with MDD" (Davis et al., 2020). With positive research results, using psilocybin in psychotherapy could prove ground-breaking for treating depression and anxiety, eliminating the need to take antidepressants for years to sustain its effect.

Another psychedelic drug that relieves mental health symptoms is Lysergic acid diethylamide (LSD), more commonly known as acid. Patients with life-threatening illnesses reported a decrease in anxiety through a State-Trait Anxiety Inventory (STAI) anxiety measure (Gasser et al., 2014), proving LSD reduced anxiety with no severe adverse effects. Granted, because of psychedelics' subjective nature, not every patient (or college student in the future) may come out of the experience with a positive or effective one. However, most patients that use psychedelics as a remedy use other generic medicine designed to treat their issues but to no avail. Thus, the attempt on doses of psychedelics may improve one's suffering life and change it for the better, perhaps (and hopefully) forever.

There is an increasing need to find remedies for treating mental health, as the U.S mental health crisis is rising, and anyone – including college students – can be affected by it.

Fortunately, psychedelics might be a solution to some of the major problems. As common causes of disability such as cardiovascular and respiratory causes continue to be manageable, the toll of mental health on people has continued to rise since the 1980s (Higgins, 2016). The alarming growth of mental health issues like anxiety, PTSD, and treatment-resistant depression have harmed the American "internal intellectual, innovative, and economic capacity" (Belouin & Henningfield, 2018) because of an incapacity to produce more effective treatment of symptoms. Mental health effects every person with a brain and does not spare anyone. Whether a person is

wealthy, healthy, tall, short, male, or female, they all are affected by mental health in one way or another. One study of psychedelics in 2018 summarizes this point effectively, stating: "Mental health disorders know no boundaries; they cross-cut all demographics; they spare no socioeconomic class; they permeate all cultures; and they inflict their debilitating effects on workers and by extension their families, from the service sector, to the manufacturing sector, to the professional sector" (Belouin & Henningfield, 2018). An average American citizen suffering from mental health issues hurts the workforce from a lack of motivation and productivity, costing the country \$326 billion in 2018 due to major depressive disorders, increasing from \$236 billion in 2010 (Greenberg et al., 2021).

With so many positive articles and journals documenting the success of psychedelic drugs like LSD and Psilocybin, it should be a great surprise to see how psychedelic drugs are treated so dangerously that research is restricted. At the same time, legal substances like marijuana and tobacco are legal with minimal restrictions. As college students, the legality of psychedelics itself eliminates any chances of using such drugs, all the while having to resort to mental toughness or antidepressants, which are less effective to support going through at least four academic years. The research presents itself with positivity, but the government still disproves the usage of more effective solutions. Psychedelics such as psilocybin and LSD can significantly decrease major depressive symptoms and anxiety, which are essential for a college student to avoid. With such an outstanding potential to help fight mental illnesses and improve the lives of individuals, it should be very confusing for governments to make it almost impossible for researchers to assess the usage of psychedelic drugs. It may be time to reconsider the legality and classification of psychedelics while being vigilant about the unresearched harms of these drugs. Nevertheless, with fewer restrictions, scientists can dig deeper and hopefully

discover more breakthrough effects of psychedelics.

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