

Perspectives on Psychedelics

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Abstract

Psychedelics are often seen as dangerous drugs, but they have a strong potential in psychological treatment. In this reflection, I argue that different perspectives came up throughout history, explaining the negative view about psychedelics and how research was impacted by that. I point out specific neurological benefits and a few negative effects, comparing to other drugs, associating my experience with mood disorders, and pointing out how some literature shaped my perspective. In the end, I reflect upon my own views about the topic, following, at last, a more optimistic direction regarding this kind of drug use in therapy.

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Reflective Diary

I have always been a very traditional and sceptical person regarding self-enhancing drugs and the use of them in therapy. But at some point, in my psychology course, I became interested in the medicinal use of psychedelics, since I have been reading about it in articles and magazines, especially on topics focusing on neuroscience. I still intend to organise a symposium next year with my interdisciplinary neuroscience interest group in my home university about the theme.

Psychedelics (hallucinogens) such as lysergic acid diethylamide (LSD), buprenorphine, mushrooms, psilocybin, and ketamine are psychoactive substances that can be used to treat mood disorders (Vollenweider and Kometer, 2010) and have the power to affect the brain in various manners: for the good - with the right dosage, approach and if it fits the medical situation - or the bad - enhancing strong perceptual illusions that can strongly disturb someone's mind. That's why, even though I am much more interested in studying psychedelics as a field of study in neuroscience research, I am

still a little bit sceptical about the use of psychedelics in the clinic. Health professionals must be extremely prepared to handle this kind of drug, carefully thinking about the risks and benefits of it.

First, to understand more about the advantages and disadvantages of those drugs, I had to ask myself some questions. What is the history of psychedelics? Why are they often seen as “the bad guys”? Aside from the mass media vehemently discouraging drug use - the famous War on Drugs (‘War on Drugs’, 2024) - higher doses of LSD and psilocybin might lead to psychotic ego dissolution - with the visual world seeming to melt, fear and paranoid ideation would take over (Vollenweider and Kometer, 2010; TED-Ed, 2018). In the U.S. and most western countries, classic hallucinogens are in Schedule 1 - a legislative category including controlled drugs known for their elevated risk of misuse, absence of recognised safety, and current lack of accepted medical applications - and therefore have higher regulatory barriers to solve and might have negative connotations as a drug of abuse (Vollenweider and Kometer, 2010). Some other new drugs that may be important for research, like mephedrone (4-methylmethcathinone), have been made illegal in the UK based on concerns about their harms, and the law on other drugs, such as cannabis, has been more stringent regarding similar concerns (Nutt, King, and Phillips, 2010). So not only mass media influences common folk to think about certain drugs as the “enemy” - preventing new forms of treatment -, but the governments themselves strengthen their laws against psychedelics.

Even some scientific data points to the dangers of using large amounts of those drugs: psilocybin can produce difficult long-lasting side effects in every 30 to 100 people in 1000, even possibly triggering psychosis, anxiety, depression, persisting post-traumatic syndrome disorder (PTSD)-like symptoms, and schizophrenia (Udacity, 2015). Some of those individuals reported having the single most challenging experience of their lives, with persistent psychological consequences (Udacity, 2015). Finally, researchers must select people very carefully for this to have the expected effect, by using longitudinal designs, which may cancel this long-lasting outcome or by using tests that can previously measure this somehow. Indeed, research also shows that subjects who volunteered in the study had one of the most personal experiences of their lives after taking one or two high doses of psilocybin (TEDMED, 2016).

According to Nutt, King, and Phillips (2010) however, the most dangerous drug, primarily to others, is alcohol, which showed, through multicriteria decision analysis (MCDA), an overall score of 72

out of 100. On the other hand, ecstasy, LSD, buprenorphine, and mushrooms were shown to be the least harmful drugs (respectively scored 9, 7, 7 and 6 on the MCDA). Unfortunately, all the strict laws for drugs that are not as dangerous as alcohol - a licit drug - limit research about what happens when small doses of self-enhancing drugs are taken. This limitation was worse before the psychedelic's renaissance. Science was suppressed, criminalised for decades, effectively halted by the early 2000s (Puccio, 2023). Maybe that's why I was more traditional in regard to those substances. For me, using those kinds of drugs in psychotherapy was crazy because I was so influenced by the media's alarming news that it became a strong bias.

I only became a little more liberal towards the subject when, in 2014, I read an article in my favourite science magazine about the importance of legalising some drugs - in that specific article, marijuana - for medical use. That was a great shift in my understanding, and I came across other data about the good effects of psychedelics, mostly in that same magazine. What really surprised me was how ketamine therapy could work with bipolar disorder (Vollenweider and Kometer, 2010) - which is a psychiatric condition I have. I could not help but wonder what outcomes I would have if I experienced psychedelic drugs as a treatment. I can only infer that it would not work. Maybe I am part of the 3% to 10% of people that have negative side effects. Since the manic episode I had involved psychotic symptoms, it would have been risky to use self-enhancing drugs instead of lithium. My "self" was very "enhanced" at the time. Therefore, it is surprising that disorders with impaired NMDA receptors can be treated with ketamine (Vollenweider and Kometer, 2010). It is also surprising that classical hallucinogens have antinociceptive potential - they block the detection of painful stimulus by sensory neurons - inhibiting nociception, the sensation of pain ('Antinociception', 2024) and may not only alleviate symptoms but also induce enduring adaptive processes, enabling neuroplasticity and behavioural changes (Vollenweider and Kometer, 2010). Drug-induced experiences improve depressed mood, giving patients a sense of positivity. In addition, moderate doses of psilocybin have shown to improve mood and reduce anxiety, providing a relief that lasts between two weeks and six months in patients with advanced cancer (Vollenweider and Kometer, 2010; TEDMED, 2016; Pollan, 2018, pp. 1–20).

All these findings support observations made in the early 1960s. I wonder at what point science would be at if those restrictions did not hinder the experiments - after decades of research, more people would be effectively treated - and even have their lives literally saved (Vollenweider and

Kometer, 2010). In conclusion, I believe that in the future, science will prevail - research is improving and new drugs are being tested. That is why it is important that students and researchers organise academic events to talk about their use - like my interest group symposium next year. Many psychedelics, aside from psilocybin, ketamine, and LSD, used in various religions (TEDx Talks, 2017), need to be studied so that treatment options can be explored. In closing, by writing this diary I have become more critical about my own views and biases, and I realised, when it comes to the neuroscience of psychedelics, there are multiple optimistic prospects.

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